



## OWNER'S MANUAL

# ROBOT CLEANER

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Read this owner's manual thoroughly before operating the appliance and keep it handy for reference at all times. Be sure to charge the battery fully before using the product for the first time after purchase.

VR669\*\*\*\*\*

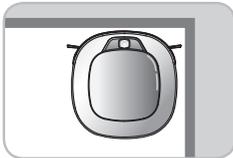


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Rev.03\_050820

[www.lg.com](http://www.lg.com)

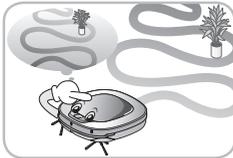
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# FEATURES



## Corner Master

By having adopted a brand new concept design that is appropriate for walls, the Robot Cleaner's cleaning performance is incredibly efficient.



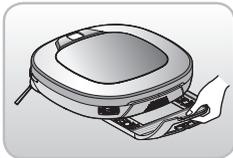
## Learning Mode

The Robot Cleaner is capable of memorizing the cleaning environment via its Smart Operation feature for smarter cleaning.



## Turbo Mode

In the Turbo mode, the Robot Cleaner operates the suction motor and the brushes at a greater speed giving cleaner results. When selected, the "Turbo" mode is automatically activated on carpets, which enables the Robot Cleaner to run more efficiently.



## Drawer Mop Plate (Option)

The "Drawer mop plate" makes it much easier for users to fit and remove the mop without having to turn over the device.



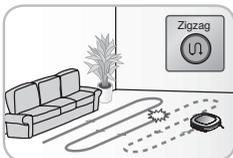
## My Space Mode

By commanding it to clean a particular area, the Robot Cleaner quickly cleans that desired area.



## Repeat Cleaning

The Robot Cleaner will continuously clean.



## Location Search Function

If the Robot Cleaner is moved from a spot while operating, the device will automatically search for the previous location and return to the spot from where it was interrupted.



## Smartphone application description

You can control the Robot Cleaner from your smartphone.

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# SAFETY PRECAUTIONS

The purpose of the safety precautions described below is for the user to use the product safely and correctly to prevent any unexpected risk of injury or damage.

## Basic safety precautions

After reading this manual, please keep it in an easily accessible location.



This is the safety alert symbol. This symbol alerts you to potential hazards that can result in property damage and/or serious bodily harm or death.



### **WARNING**

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.



### **CAUTION**

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



## **WARNING**

1. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
2. Children should be supervised to ensure that they do not play with the appliance.
3. If the supply cord is damaged, it must be replaced by LG Electronics Service Agent in order to avoid a hazard
4. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance must not be made by children without supervision.

# SAFETY PRECAUTIONS

## ! WARNING



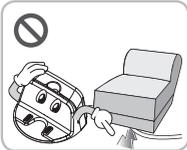
For your safety, do not remove the battery from the Robot Cleaner. If you need to replace the battery of the Robot Cleaner, take it to the nearest authorized LG Electronics service center or dealer for assistance.

Failure to follow this warning can cause fire or product failure.



Never use the Robot Cleaner with a battery and/or home station from any other product than the Robot Cleaner.

Doing so can cause fire or product failure.



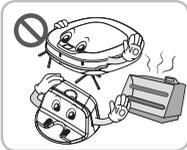
Make sure the power cord of the home station is not crushed under a heavy object or damaged by contact with sharp objects.

Failure to follow this warning can cause electric shock, fire or product failure. If the power cord is broken, do not plug it in. Take the product to an LG Electronics Authorised service repairer.



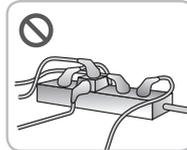
Do not use the Robot Cleaner when candles or fragile objects are placed on the floor.

Doing so can cause fire or product failure.



Do not place the home station and the Robot Cleaner near a heating device.

Doing so can cause product deformation, fire, or product failure.



Always use a dedicated power outlet with a 10 amp rating.

If multiple appliances are connected to an outlet simultaneously, they can generate enough heat to cause a fire.



Do not force the power plug to bend. Do not use the power plug when it has been damaged or loosened.

Doing so can cause fire or product failure.



When pulling out the home station power plug, always pull it out by grabbing the plug, not the cord. When pulling out the power plug, do not touch the prongs with your fingers.

Doing so can cause an electric shock.



Do not touch the power plug with wet hands.

Doing so can cause electric shock.



Do not allow children or pets to play with or rest upon the Robot Cleaner at any time. Do not use the Robot Cleaner while an object is hanging from it.

Doing so can cause injury or product damage.

# SAFETY PRECAUTIONS

## ! WARNING



Do not spray or use inflammable materials, surfactants, or drinking water in the vicinity of the Robot Cleaner.

Doing so can cause fire or product failure.

- \* Inflammable materials: gasoline, thinner, etc.
- \* Surfactant: detergent, articles for bath, etc.



Turn the power supply off immediately if any abnormal sound, odor, or smoke is generated from the Robot Cleaner by removing it from the home station and turning off the main switch on the rear side of the unit.

Failure to do so can cause fire or product failure.



Do not insert any part of the body, such as a hand or foot, below the brush or wheels of the Robot Cleaner while in use.

Doing so can cause injury or product damage.



Do not operate the Robot Cleaner in a room where a child is sleeping.

Doing so can cause injury or product damage.



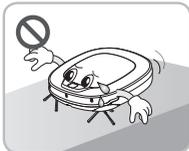
Do not operate the Robot Cleaner on narrow and high furniture such as a wardrobe, refrigerator, desk, table, etc.

Doing so can cause injury, product failure or damage which is not covered by the warranty.



Do not leave Children or pets near the Robot Cleaner unsupervised.

Doing so can cause injury or product damage.



Do not activate the device on a floor that has more than a 10 degree incline.

The device may not work properly.



After installing the mop, pay attention to the moisture remaining on the floor when using it.

The floor is slippery and may cause injury.

! This product is intended for indoor domestic home use and should not be used in mobile applications. It should not be used in commercial applications such as workshops or garages or around indoor swimming pools, etc.

# SAFETY PRECAUTIONS

## ! CAUTION



Frequently empty the dust bin and maintain its cleanliness.

The dust collected in the dust bin can trigger allergies and may contain harmful insects. It should be cleaned after each use.



Use the Robot Cleaner indoors only.

Using it outdoors can cause product failure and irreparable damage to the unit.



Close the cover of the dust bin on the main unit before starting cleaning.

If the cover is not closed, it can cause injury or product damage.



DO NOT use the Robot Cleaner around a banister, staircase or any other dangerous place.

Doing so could cause injury or damage to the unit.



In rare cases, the Robot Cleaner's brush can damage carpet. If this happens, immediately stop the cleaning operation.

When a carpet has long tassels, the tassels can be damaged.



Do not let the main unit and charging terminal of the home station come into contact with metallic objects.

Doing so can cause product failure.



Do not put water, detergent, etc. into or onto the Robot Cleaner.

Doing so can cause product failure. Do not put any water or detergent on the Robot Cleaner. If liquids get inside of the Robot Cleaner, turn off the power supply and contact an LG Electronics sales agent or customer care center.



Do not drop the Robot Cleaner or subject it to strong impacts.

Doing so can cause injury or product failure not covered by the warranty.



Do not expose the Robot Cleaner to cold temperatures (less than  $-5^{\circ}\text{C}$ ) for a long period of time.

Doing so can cause product failure.



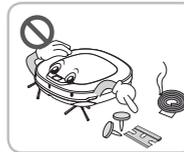
Remove any cables or string from the floor before starting.

Cable or string can get tangled in the wheels of Robot Cleaner and cause product failure or the cord of an appliance can be disconnected.



Make sure the Robot Cleaner is not put on a table or desk, with the power ON.

It may result in an injury or damage to the product.



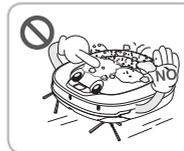
Do not allow the Robot Cleaner to sweep up liquids, blades, thumb tacks, sharp objects or ashes, hot or cold, etc.

These items can cause product failure or damage.



Do not put sharp objects into the opening of the Robot Cleaner's ultrasonic sensors.

Doing so can cause product failure.



Do not use the Robot Cleaner when the dust bin is completely full.

Doing so can cause product failure.

# SAFETY PRECAUTIONS

## ! CAUTION



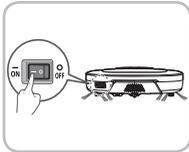
If the floor is wet or has wet spots, wipe them up before using the Robot Cleaner. Do not use the Robot Cleaner on a wet surface.

Doing so can cause product failure.



When attaching the mop, ensure that it is fitted correctly so that it does not block the lower camera sensor.

Blocking the bottom camera sensor may not allow the product to work correctly.

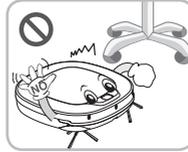


To save energy when the Robot Cleaner is not in use for longer periods, turn off the power switch, and turn on the power switch again just prior to using the Robot cleaner again.



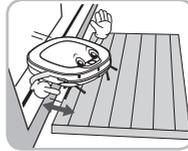
Remove mop cloth after use. Do not leave the Robot Cleaner idle with mop cloth attached.

The mop cloth may damage the floor.

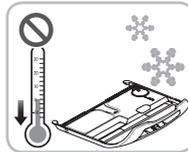


When the robot cleaner is operating, it may hit the chair leg, desk leg, table leg or other narrow pieces of furniture.

For quicker and better cleaning, place the dining chairs on top of the dining table.



NOTE: Very low thresholds will allow the Robot cleaner to go over them and perhaps into an undesirable location. Make sure that all the doors of the rooms that are not to be cleaned are closed. Oddly shaped and sized thresholds can cause the cleaner to become stuck. This is not a malfunction.



Do not store the water tank at 0°C or lower temperature.

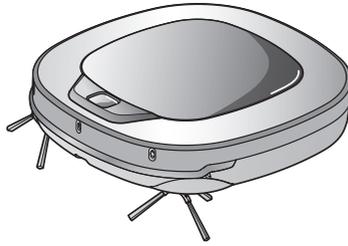
This may cause product failure.

## ✓ Tip

Check the following items before use:

- Empty the dust bin after each operation or prior to it filling up.
- Remove any cables or long strings from the floor.
- Remove any moisture from the floor before cleaning.
- Close the cover of the dust bin before cleaning.
- Remove fragile or unnecessary objects from the room to be cleaned. For example, remove expensive ceramics and valuables from the floor.
- Confirm whether the battery has sufficient power, and if it is low, recharge it.
- Close the doors of any room that you do not want the Robot Cleaner to enter. During cleaning, the Robot Cleaner may enter another room and continue cleaning.
- Do not use this product in the room where a child is sleeping alone. The child can be hurt or woken.
- Remove towels, foot towel or any other thin cloth from the floor as they can get caught by the brush.
- Before starting the device, it's better to remove carpets that are thicker than 20 mm as they may cause it to malfunction.
- Please close any balcony doors as the wheels may get stuck while cleaning.
- Connecting to a wireless router without proper security setup may cause security issues.
- If security is set up internally for your organization, it may affect connection therein.
- All batteries/accumulators should be disposed separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
- For more detailed information about disposal of Your old batteries/accumulators, please contact Your city office, waste disposal service or the shop where You purchased the product.
- All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
- For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.
- In the case of a floor with high brightness contrast such as marble, the recognition rate of the bottom sensor may be lower, and the robot cleaner may operate abnormally.

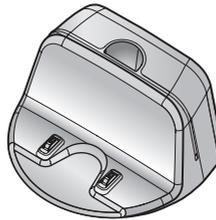
# INCLUDED WITH PRODUCT



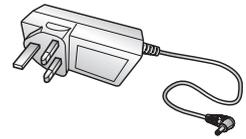
Robot Cleaner



Remote controller

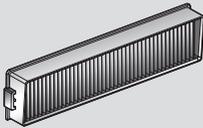


Home station



Adapter

► Figures can be different from actual objects.



Particulate filter  
(option)



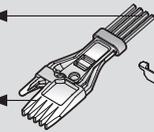
Quick guide



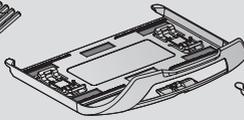
Operation manual

for cleaning  
sensors

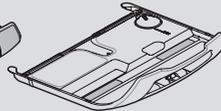
for cleaning  
brush



Cleaning Tool  
(It's on the dust bin cover)



Mop plate  
(option)



Self-wetting mop plate  
(option)



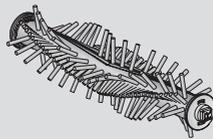
Ultra microfiber mop  
(2 pieces) (option)



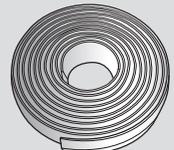
Batteries for remote controller  
(2 units of AAA size)



Side brush (2 pieces)  
(option)



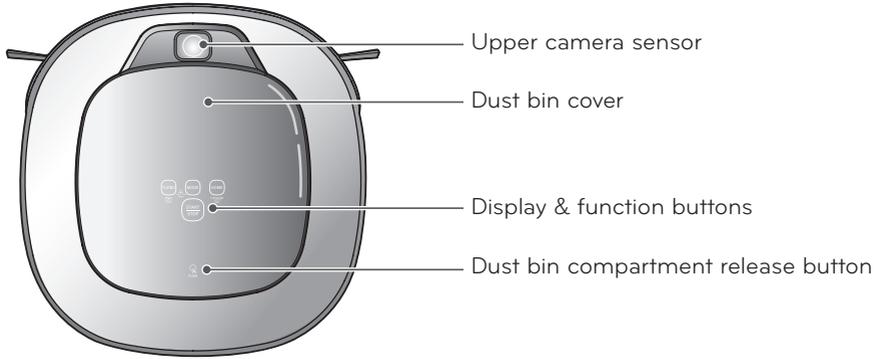
Pet Brush  
(option)



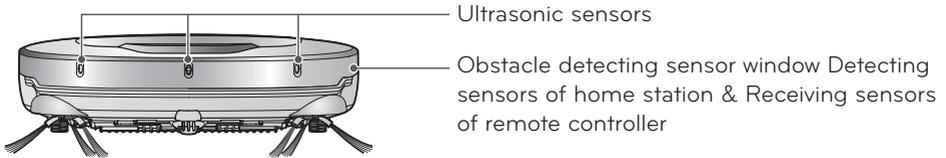
Magnetic Wall strip  
(2 m) (option)

# PARTS DESCRIPTION - ROBOT CLEANER

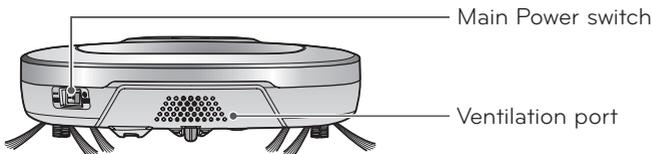
## Plan view



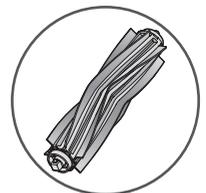
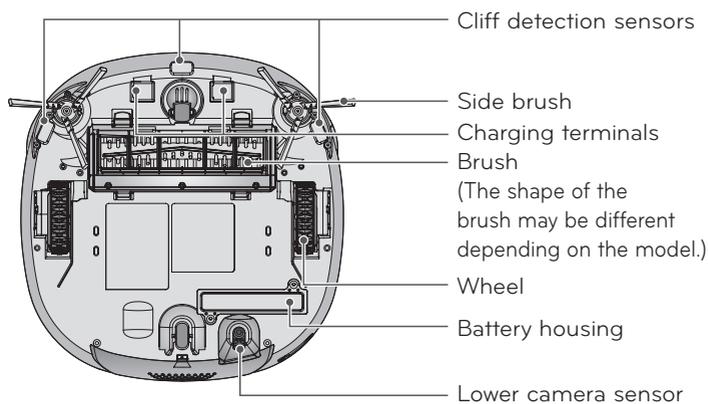
## Front view



## Rear view



## Bottom view

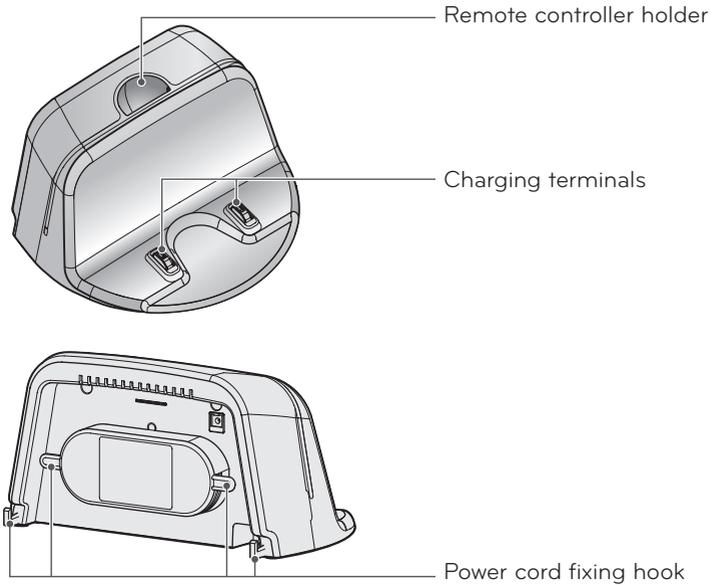


(For some models)

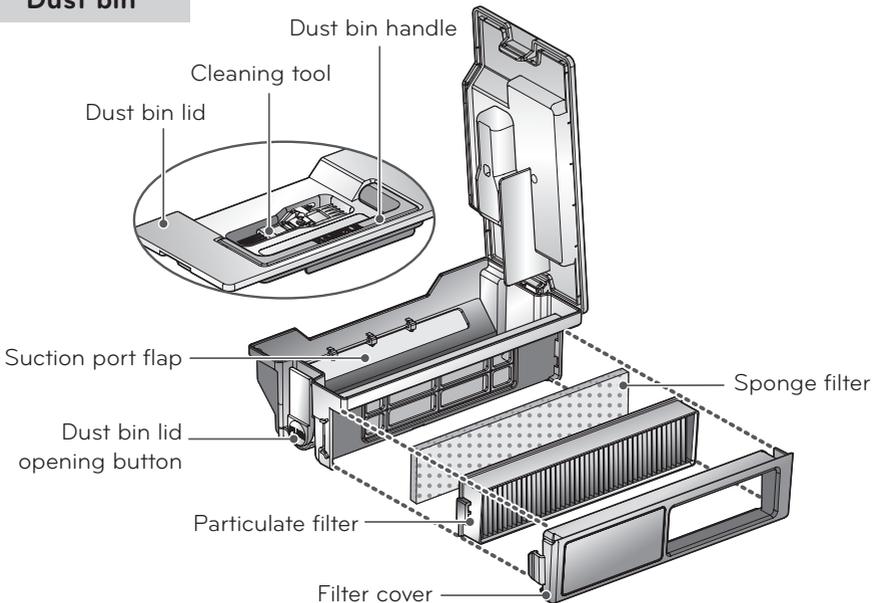
► Figures can be different from actual objects.

# PART DESCRIPTION – HOME STATION / DUST BIN

## Home station

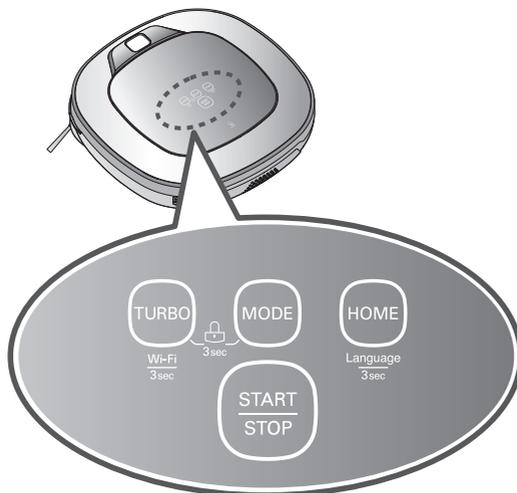


## Dust bin



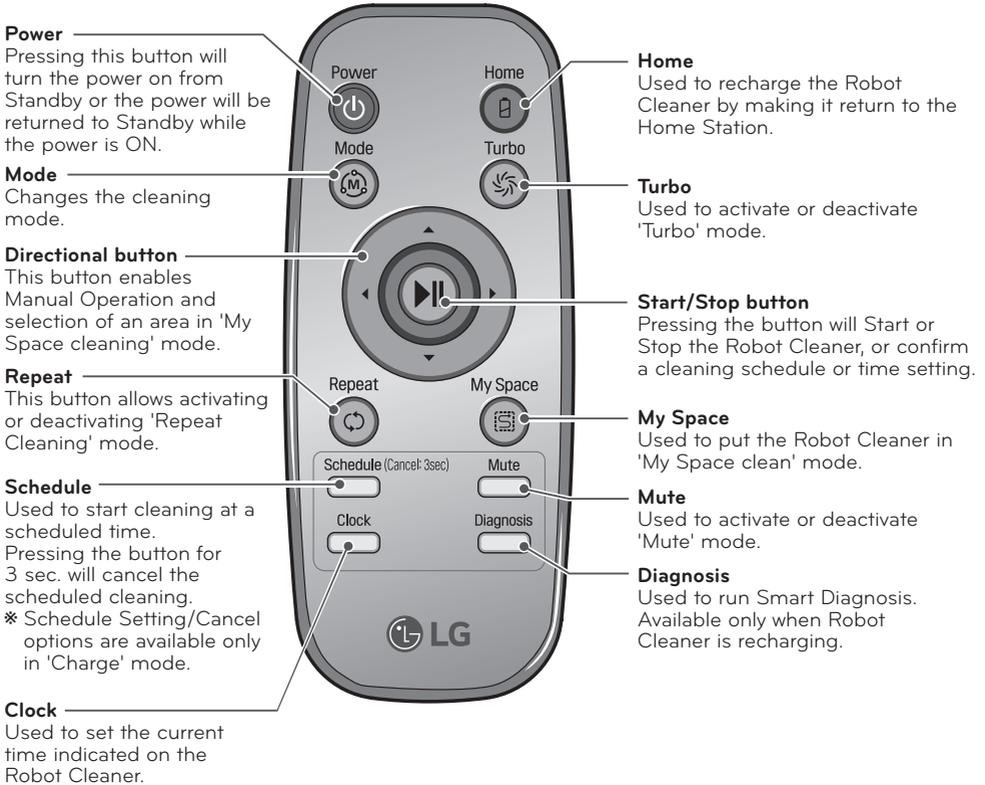
► Figures can be different from actual objects.

# BUTTON FUNCTIONS – ROBOT CLEANER



<b>TURBO</b>	<ul style="list-style-type: none"> <li>• If the button is pressed, 'Turbo Mode' will be set with a voice confirmation.</li> <li>• If the button is pressed whilst in 'Turbo Mode', it will be canceled.</li> </ul>
<b>START/STOP</b>	<ul style="list-style-type: none"> <li>• Used to turn the power on from Standby, start or stop cleaning.</li> <li>• If the button is pressed whilst the unit is powered ON, it will start cleaning.</li> <li>• If button is pressed during the cleaning, it will stop the cleaning.</li> <li>• If the button is pressed for about 2 sec. whilst the power is ON, the power will be returned to Standby.</li> <li>• If the button is pressed in 'Smart Diagnosis' mode, it will end the diagnosis.</li> </ul>
<b>MODE</b>	<ul style="list-style-type: none"> <li>• Used to change the clean mode setting.</li> <li>• If the machine is at the Home Station, 'Spot Clean' option is not available.</li> <li>• The 'My Space' mode can only be selected by remote control (when the Robot Cleaner is not on the home station).</li> </ul>
<b>HOME</b>	<ul style="list-style-type: none"> <li>• Used to return the Robot Cleaner back to the home station for charging.</li> <li>• If cleaning is finished or the battery is low, the Robot Cleaner will return to the Home Station by itself to recharge its battery.</li> </ul>
<b>BUTTON(KEY) LOCK ON/OFF</b>	<ul style="list-style-type: none"> <li>• Pressing the 'Turbo' and 'Mode' buttons simultaneously for 3 seconds will activate or deactivate the Lock function.</li> <li>• If 'Lock' is ON, a voice announcement "Key lock has already been set" will be heard each time a button is pressed.</li> </ul>
<b>Language</b>	<ul style="list-style-type: none"> <li>• Pressing the 'HOME' button for 3 seconds will change the Language for the voice message.</li> <li>• You cannot use this function with the button on the remote controller.</li> </ul>
<b>Product registration (Wi-Fi)</b>	<ul style="list-style-type: none"> <li>• Press and hold down the Turbo button for 3 seconds to activate the registration mode with a voice message.</li> <li>• This mode is for registering the product to Robot Cleaner over Wi-Fi.</li> </ul>

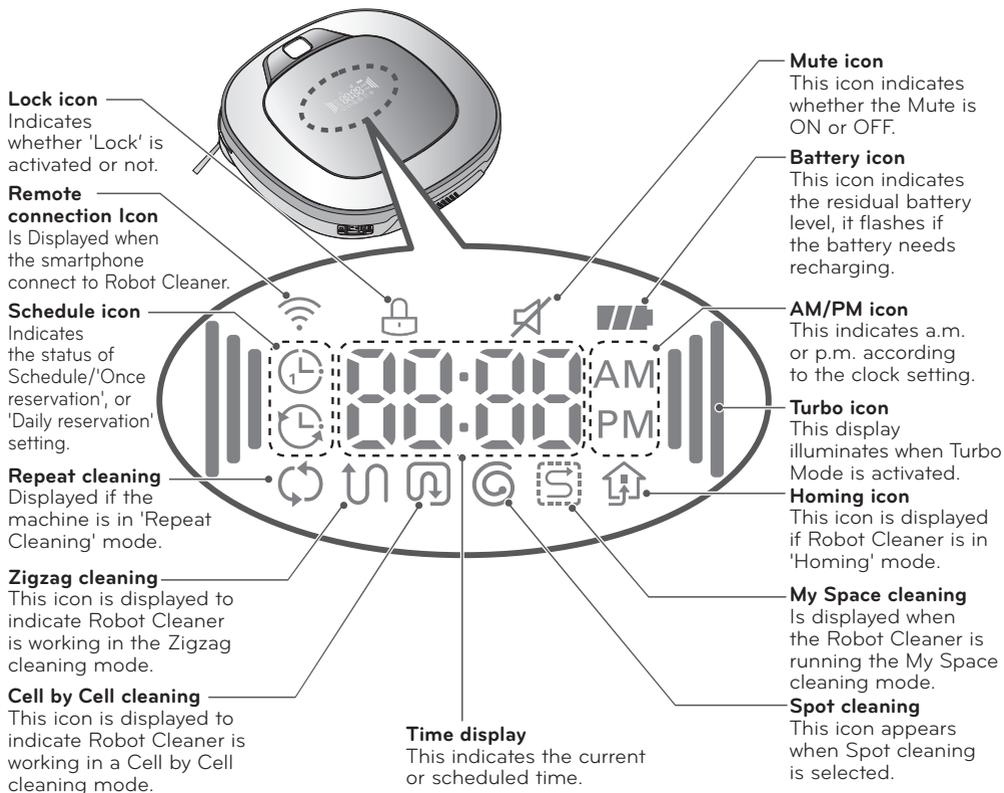
# BUTTON FUNCTIONS – REMOTE CONTROLLER



## Tip

- With the machine's power OFF, the Remote Controller will not work.
- To turn the power ON/OFF, use the 'START/STOP' button on the upper section of the Robot Cleaner or 'Power' button on the Remote Controller.
- The 'Mode', 'My Space' or 'Clock' button can only be used after stopping the Robot Cleaner or whilst it is charging on the Home station.

# DISPLAY STATUS INFORMATION



## Tip

- Once the clean mode is selected (Zigzag or Cell by Cell) it will be remembered even if the power is turned OFF.
- To cancel the scheduled cleaning time, please press the 'Schedule' button on the remote for 3 seconds while the Robot Cleaner is recharging.

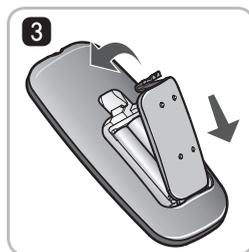
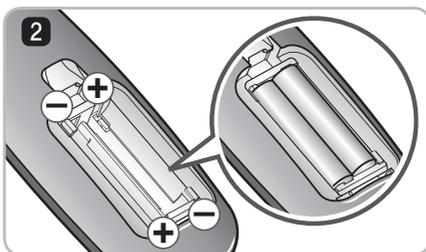
# BEFORE YOU START

## Check these items before cleaning

- Do not use this device in a room where a child is left alone. The child could be injured.
- Remove fragile or unnecessary objects from the room to be cleaned. Especially, remove expensive ceramics and valuables from the floor.
- Close the cover of the dust bin compartment before cleaning.
- Remove any moisture that might be on the floor.
- Remove cables, strips, towels, mats etc. from the floor so they will not get tangled in the brushes.
- Confirm whether the battery charge is sufficient, and if it is low, recharge it.
- Empty the dust bin before or after each clean, or before it becomes full.
- Close the doors of any room that you do not want the Robot Cleaner to enter. During cleaning, the Robot Cleaner may enter another room and continue cleaning.
- When the mop is attached, Robot Cleaner will not be able to go over thresholds of 5 mm or higher. If you are not planning to use the mop for cleaning, remove the mop before using Robot Cleaner.
- Before starting the device, it's better to remove carpets that are thicker than 20 mm as they may cause it to malfunction.
- Please close any balcony doors as the wheels may get stuck while cleaning.
- In the case of a floor with high brightness contrast such as marble, the recognition rate of the bottom sensor may be lower, and the robot cleaner may operate abnormally.
- Do not attach an object to the sensor of the product (may hamper the driving of the product).

## Loading the remote controller battery

1. Open the battery cover by lifting the rear hook of the remote controller.
2. Insert two AAA batteries, checking for +, - nodes while loading.
3. Close the battery cover completely so that the batteries will not fall out.



## Precautions while using the remote control

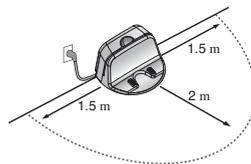
- Only press one button at a time.
- Do not drop or subject it to any impact.
- Do not store it near devices that give off heat, fire or hot air.
- Certain fluorescent lamps, such as the three band radiation lamp, can interfere with the activation of the remote control. Therefore, use it as far away as possible from such lamps.
- If the remote control is far from the Robot Cleaner when activated, it may fail to operate properly. Use the remote within 3 m of the Robot Cleaner if possible.

# OVERVIEW

1

## Install the home station.

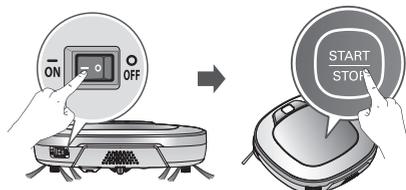
Insert the power cord plug into an outlet and locate the station against a wall. If power is not supplied to the home station, the Robot Cleaner will not charge.



2

## Turn on the power supply of the Robot Cleaner.

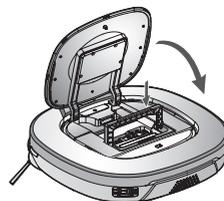
Turn ON the power switch on the rear-left of Robot Cleaner, and press the 'START/STOP' button on the top or press the 'Power' button on the Remote controller.



3

## Check the dust bin.

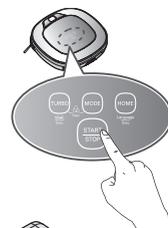
Check the cleanness of the dust bin before starting cleaning and close the dust bin compartment cover on the main unit.



4

## Start cleaning.

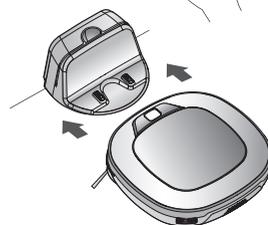
Press the 'START/STOP' button (or '▶▶' button on the Remote Controller) once again while the Robot Cleaner is turned on. You will hear an announcement of the cleaning mode and cleaning will begin once the Robot Cleaner has reversed and turned around.



5

## Automatic charge.

The Robot Cleaner will self-diagnose and automatically return to the home station to recharge before the complete discharge of the battery. It takes approximately three hours to charge the battery.



6

## Use the cleaning mode and auxiliary functions.

Use the buttons on Robot cleaner and Remote Controller to use each cleaning mode and supporting features

Cleaning modes include ZigZag, Cell by Cell, Spot, My space, and Repeat cleaning; supporting features include Manual, Scheduled and Microfiber Mop cleaning.



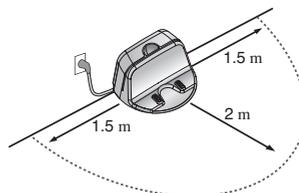
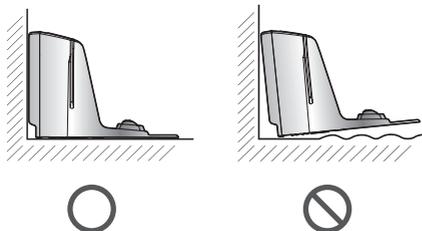
< Warning > When the Robot Cleaner is operated with the dust bin compartment lid left open, it can cause an injury or serious damage to the product.

# HOW TO INSTALL THE HOME STATION

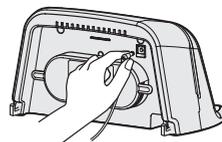
## How to Install the Home Station

1. Position the home station against a wall on hard level flooring to prevent sliding during docking.

Remove objects within 1.5 m to the right and left side and within 2 m to the front.

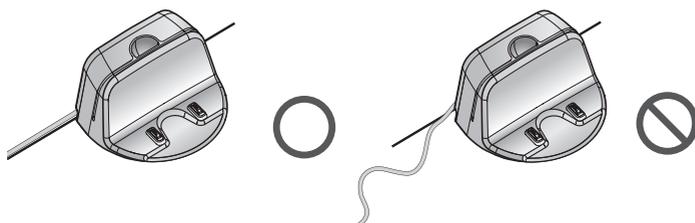
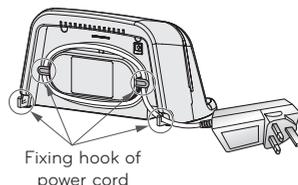


2. Plug the jack into the home station.

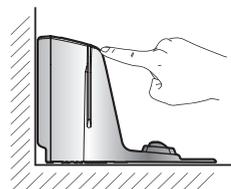


3. Plug the power cord into an outlet.

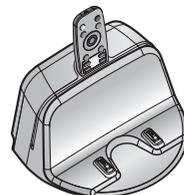
Wrap the remaining power cord around the fixed hook on the back side of the home station or along the wall surface so that the travel path of the Robot Cleaner will not be obstructed.



4. Fix the home station against the wall so that it does not move.



5. When the remote controller is not used, store it in the remote controller holder on the home station.



**Tip** • Always keep the home station plugged in when in use. If the home station is not plugged in, the Robot Cleaner will not return to the station to charge automatically.

**< Warning >** Do not operate the Robot Cleaner if the Home Station has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped. To avoid electrical hazards, the cord must be replaced by LG Electronics, Inc. or a qualified service person.

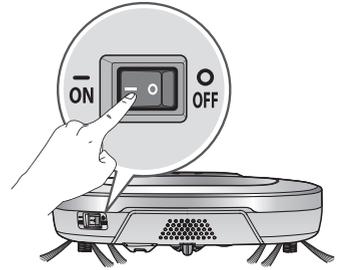
# HOW TO TURN THE ROBOT CLEANER POWER SUPPLY ON & OFF

## Turning on the main power supply

Make sure the Power Switch is on at the rear-left of the Robot Cleaner.

If the power is OFF, turn the switch ON.

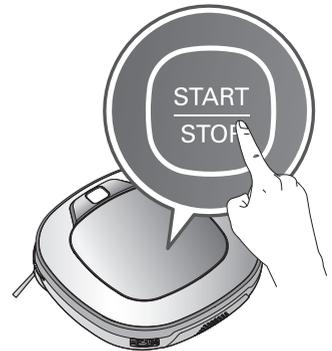
- \* When turning on the power switch, do not press or touch any button located on the upper section of the Robot Cleaner. Button operations can be delayed.
- \* Turn off the power switch if the Robot Cleaner is not used for a long period of time in order to protect the battery. The Robotic Cleaner cannot charge if the main switch is in the "OFF" position.



## Turning on from Stand By power.

With the Standby power of the Robot Cleaner OFF, press 'START/STOP' button for 1 second until a "Ting" sound is heard or press 'Power' button on the remote controller. In about 10 seconds, the power will be on and a melody will sound.

- \* If 10 minutes elapse without the Robot Cleaner having being given an active command after being turned on, the power will automatically return to Standby again.



## Turning off the power supply

Press and hold the START/STOP button for two seconds or Power button on the remote controller while the Robot Cleaner is turned on. A melody will sound when the power is turned off.

- ✓ **Tip**
- If the power cannot be turned on, do the following.
    - Turn the main power switch OFF, wait 5 seconds then ON again.
    - Press the 'START/STOP' button or press 'Power' button on the remote controller after the main power switch has been turned on again
    - If the power is not turned on or if there is no display but only the "Ting" sound, put the Robot Cleaner manually on to the home station as the battery may be flat.

# HOW TO START AND STOP CLEANING

## Using the buttons on the Robot Cleaner

After the Robot Cleaner main power switch is turned on, press the START/STOP button to begin cleaning. A melody will sound and cleaning will begin.

Press the START/STOP button during the cleaning cycle to stop cleaning.

※ When the 'START/STOP' button is pressed while the power supply of the Robot Cleaner is in Standby, the power will be turned on. Press the 'START/STOP' button one more time to start cleaning.



## Using the remote controller

After the Robot Cleaner is turned on press the '▶||' button on the remote controller. A melody will sound and cleaning will begin.

Press the ▶|| button during the cleaning cycle to stop cleaning.

※ When the power is off, press the 'Power' button on the remote controller to turn the power on.



※ During cleaning, collisions can happen when the sensor cannot detect objects because of their shape (Thin chairs and table legs, furniture corner). When this happens, the internal impact detecting sensor will react by using a backward motion.

※ If the Robot Cleaner is set to start cleaning at a location away from the home station, put the Robot Cleaner on a flat floor in order to prevent a malfunction of the obstacle detecting sensor. In addition, start cleaning from a location where there are no obstacles. For example, curtains or walls must be 30cm from the Robot Cleaner.

 **Tip** For best results:

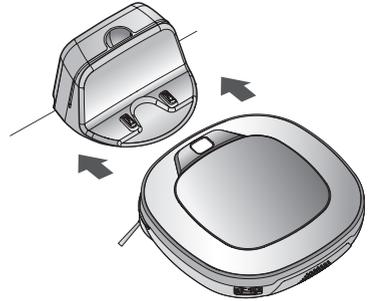
- Briefly scan the area to be cleaned for big and small objects that will cause difficulty for the Robot Cleaner.
- If cleaning is started when the Robot Cleaner is at the home station, the device can rapidly be returned to the home station as the current home position has been accurately read.
- When the mop plate is installed, to prevent a 2<sup>nd</sup> contamination from the contaminated mop, it will not go over door sills of 5 mm or higher.

# HOW TO CHARGE THE BATTERY

## Automatic charging

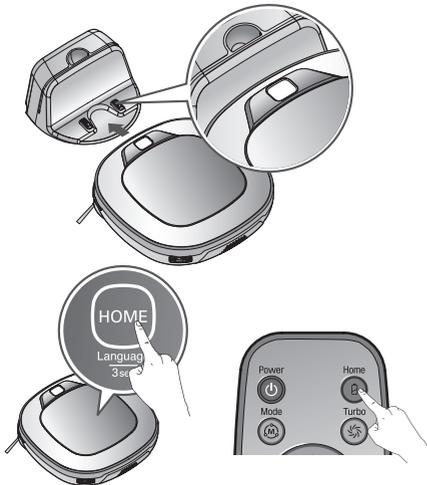
The Robot Cleaner returns to the home station at the end of a cleaning cycle or when its battery is running low.

- ※ If 10 minutes elapse without the Robot Cleaner moving or the battery is too low, the power will be automatically turned OFF.
- ※ **Do NOT turn OFF the Main Power Switch as the battery will not be recharged. If the machine is returned manually with the Main Power Switch OFF, it announces an error message, "Main power switch on the back of the Robot Cleaner is turned off. Please turn the switch on."**
- ※ In the event that the unit returns to the Home Station due to a low battery during the cleaning, cleaning will be started, after recharging, from the nearest place of the area which has not been cleaned before.
- ※ If Robot Cleaner is unable to dock to the home station on its first attempt, it will try again until it docks successfully.
- ※ When Robot Cleaner has completed all areas that it can clean, it will return to the home station even when the battery level is not low.



## Manual charging

You can manually charge the battery prior to using the Robot Cleaner for the first time or to charge the battery during cleaning.



**Method 1.** Attach the Robot Cleaner to the home station by aligning to the front side of the home station. A melody sound will be generated along with an audio message to start charging.

- ※ If a voice message, "Main power switch on the back of the Robot Cleaner is turned off. Please turn the switch on." is announced repeatedly, then turn on the Main Power Switch.

**Method 2.** When the 'HOME' button of the remote control or the Robot Cleaner is pressed, charging will be prompted by automatically generating a searching signal and returning the Robot Cleaner to the home station.

- ※ If the Robot Cleaner did not start cleaning from the home station or if the Robot Cleaner is manually charged by pressing the Home button, it may take slightly longer to find the home station.
- ※ If the Robot Cleaner is within 10 cm of the front of the charging terminal while the power is turned on from Standby, it will automatically be returned to the home station and charging will begin.

**Tip** Take the following precautions when using the home station:

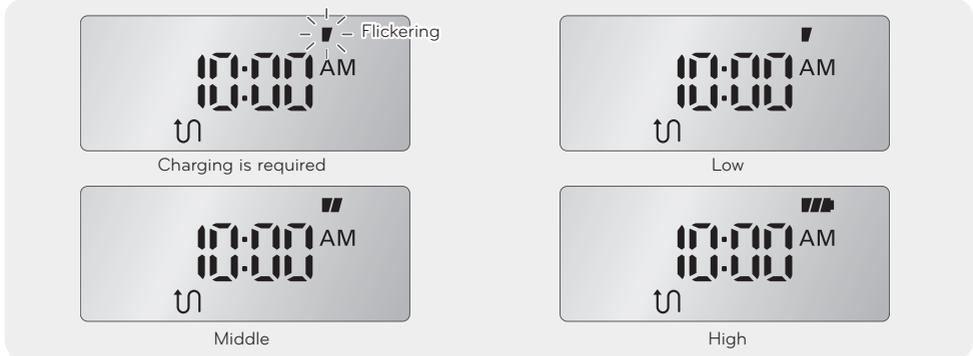
- If foreign material is caught on the charging terminals, charging may not be activated. Wipe the terminals from time to time with a dry cloth after the power plug is disconnected.
- To prevent electric shock or damage to the home station, do not touch the charging terminals with any metallic objects.
- To avoid fire or electric shock, never disassemble or modify the home station.
- Do not place the Robot cleaner, the home station or power plug near a heating source.

# HOW TO CHARGE THE BATTERY

## Remaining Battery Charge Indicator

The Battery level is indicated on the Status Display, as follows.

- If recharging is in progress, the Battery Level indicator flashes showing the battery charge status level.
- If recharging is complete, only the 'Battery' and 'Clean Mode' icons are displayed to save the energy.
- Upon the need for recharging, only the first level of the Battery charge level indicator will be on and flashing.



\* If Robot Cleaner goes back to the Home Station, in need of a charge during the cleaning mode, the Cleaning mode indicator will continue to flash during charging to indicate that cleaning was disrupted as the battery required charging.

- When the 'Clean Mode' lamp continues to flash after recharging is complete, Robot Cleaner will then resume cleaning the areas which were not previously completed.
- Pressing the 'Start' button on the Remote Controller or 'Start/Stop' button on main unit whilst it is recharging, with the 'Clean Mode' lamp flashing, will also manually force the Robot Cleaner to find and clean the uncovered areas.
- Pressing the "Start" button on the remote control or the "Start/Stop" button on the Robot Cleaner after the Charging has completed will make the Robot Cleaner start to clean from the beginning again.

The status indicators show the different pending conditions during charging mode.



When there is no existing area to be cleaned after charging.



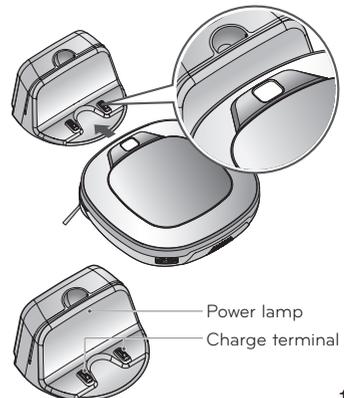
When there is an existing area that the Robot Cleaner will resume cleaning when charging has completed. (flashing Cleaning indicator)

## If the Battery is Not Charging

### Check 1:

If the battery is not charging even when the Robot Cleaner is attached to the home station, check the following items.

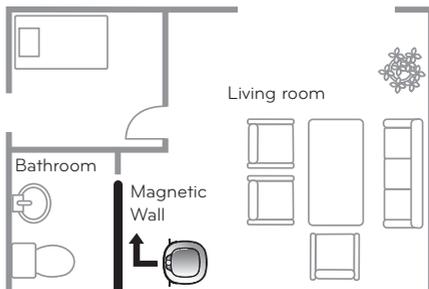
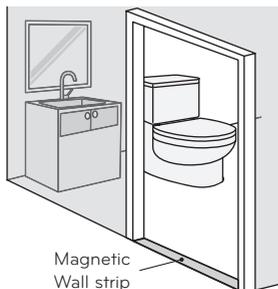
- Turn the power switch on the rear-left of the Robot Cleaner off once and then on again.
- Check the power lamp of the home station.
- Wipe the terminals on the home station with a dry cloth.



# USING MAGNETIC WALL STRIPS (OPTION)

Use a Magnetic Wall strip to block off areas the robot cleaner should not enter. The Magnetic Wall strip is only included with some models. To purchase a strip for use with a model that did not include one, or to purchase additional strips, visit the LG website at [www.lg.com](http://www.lg.com).

1. Use a Magnetic Wall strip to block off areas the robot cleaner should not enter.

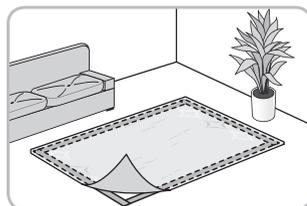
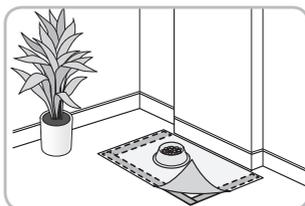
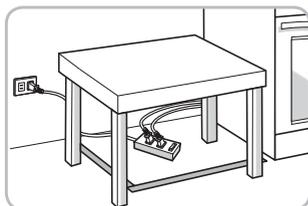
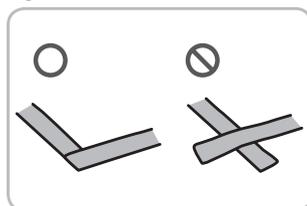
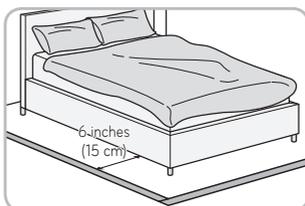
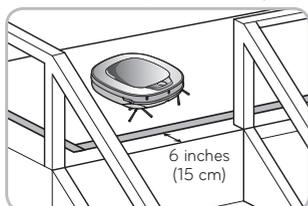


2. Use the Magnetic Wall in areas where the robot cleaner could be damaged or could cause damage to objects.

- \* Place the Magnetic Wall strip at least 6 inches (15 cm) away from the object.
- \* Place the Magnetic Wall strips underneath the edges of carpets or mats you don't want cleaned.
- \* Do not overlap the ends of the Magnetic Wall strips.

## Use the strips:

- Around stairs where the robot cleaner could fall
- Around lamps, plants, or other fragile items
- Around sofas, tables, chairs, or pet bowls to avoid scuffs and impacts
- Around tables, or thick carpets where the robot cleaner wheels could get stuck



## Tip

- You can cut the Magnetic Wall strip into shorter lengths. Make sure the Magnetic Wall strips form a continuous shape when surrounding an object. If the strips do not form a continuous line, the robot cleaner may have difficulty recognizing them.
- Only use the Magnetic Wall strip provided with the product. Third-party magnetic strips may not be recognized by the robot cleaner.
- If necessary, use removable tape such as gaffer's tape or painter's tape to keep the Magnetic Wall strip in place.
- Do not install Magnetic Wall strips near products which are susceptible to magnetic fields, such as speakers, desktop computers or hard drives, laptops, and some electronics including CRT TVs.

# CLEANING MODES

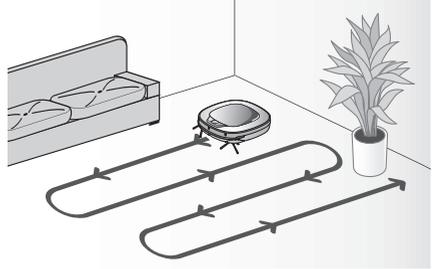
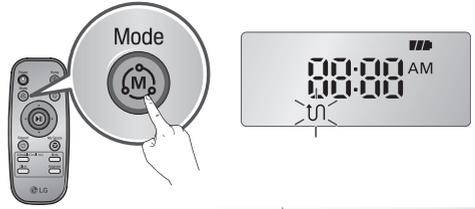
## Zigzag Cleaning

In 'Zigzag' mode, Robot Cleaner repeats a zigzag operation to clean each and every spot in the cleaning area.

If you need to quickly clean an area choose 'Zigzag' mode.

Press 'Mode' button on Remote Controller or main unit to select 'Zigzag' mode and press '▶||' button.

\* Factory release default setting is 'Zigzag'.



## Cell by Cell Cleaning

In 'Cell by Cell' mode, Robot Cleaner cleans the area by dividing it into rectangular spaces. For meticulous cleaning, select this mode.

Press 'Mode' button on Remote Controller to select 'Cell by Cell' mode and press '▶||' button.

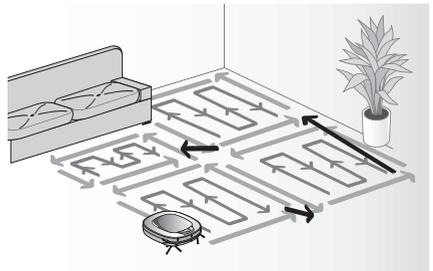
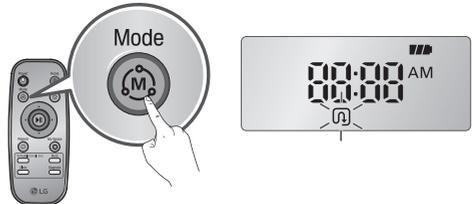
### The 1st stage:

The maximum outline of 3 m x 3 m of cleaning area will be cleaned. (The size of the outline may vary in accordance with the shape of the area to be cleaned.)

### The 2nd stage:

The 2nd stage of Cell by Cell cleaning engages a Zigzag mode automatically.

When the 1st, and 2nd stages are completed, the cleaned area will be cleaned again through the repetition of the above cleaning method as the Robot cleaner advances to the next part of cleaning area.



### Tip

- Once set up, the cleaning mode(Zigzag, Cell by Cell) setting will be retained even after the power supply is turned off.
- During operation, if a mode change is required, press the ▶|| button and then select another mode. Cleaning will then start from the beginning.
- The Robot cleaner may engage in a reverse direction without encountering any obstacles. This may be caused by a reflective or dissimilar surface, or a compromised lower infrared sensor.

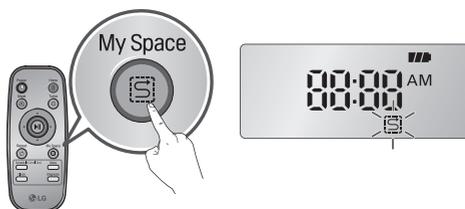
# CLEANING MODES

## My Space Cleaning

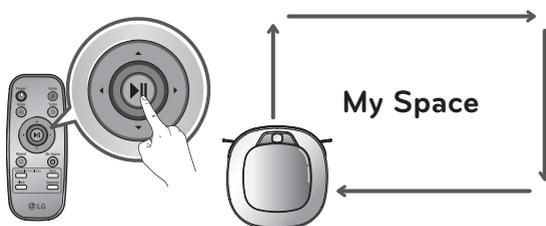
Pressing 'My Space' on the Remote Controller will set the My Space cleaning mode with a voice message. For cleaning of particular spaces, select this mode.

### The 1st stage:

Use the Remote Controller to manually set the parameters of each cleaning block.



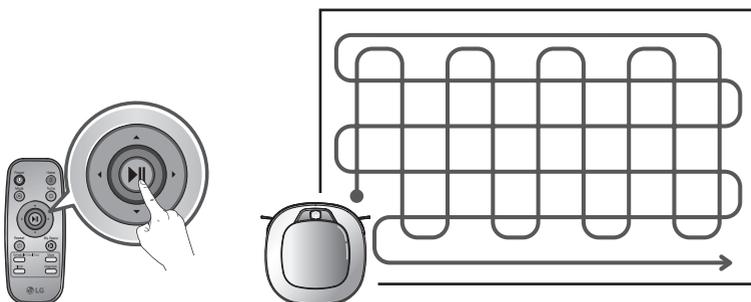
- \* This cleaning mode will be accepted when the distance of the start and end position is less than 1 m square in surface area.



### The 2nd stage:

Pressing the '▶▶' button will then make the Robot Cleaner clean the manually outlined area by itself.

- \* Upon failure to correctly outline a zone, a voice will announce, which says "Area does not meet the specified conditions. Please continue to make specified area for cleaning process."  
Use the Remote Controller to assign a zone, again.
- \* Upon completion of cleaning for all selected areas, the Robot Cleaner will resume the cleaning mode (Zigzag or Cell by Cell) which it was last set to.



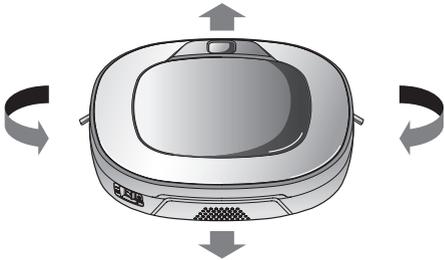
- ✓ **Tip** • While recharging, you cannot activate 'My Space' mode.
- To change the cleaning mode while the Robot Cleaner is in operation, press ▶▶ button first then select a cleaning mode. The cleaning will then start from the beginning.

# AUXILIARY CLEANING MODES

## Manual Cleaning

By pressing a direction key on the Remote Controller, you can move the Robot Cleaner manually. Robot Cleaner will clean the area, by pressing the forward/backward/left/right buttons accordingly on the keypad of the remote control.

While in 'Manual' mode, the robot cleaner will run into obstacles placed behind it if the backward key on the remote is pressed or held down.



## Spot Cleaning

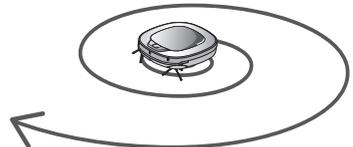
Is best used to clean certain parts of the house.

Press 'Mode' button on the Remote Controller to select 'Spot' mode, which will then indicate on the Status Display, then press the **▶||** button, then Robot Cleaner will start Spot cleaning an area of 1.5 m in diameter around it.

\* 'Spot' cleaning cannot be selected while the unit is recharging.



It stops at the started position after completing the cleaning(takes 4-5 min.).



# AUXILIARY CLEANING MODES

## Turbo Mode

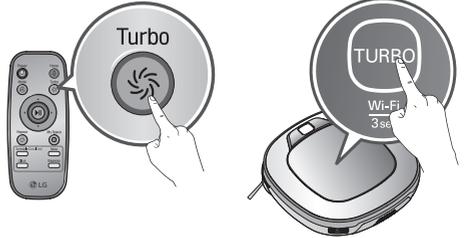
Pressing the 'Turbo' button on the Remote Controller or main unit will activate 'Turbo' mode, with a voice message.

While in 'Turbo' mode, pressing the same button will cancel 'Turbo' mode, with a voice message.

In 'Turbo' mode, Robot Cleaner runs more intensely for a powerful clean. Turbo mode will however reduce the battery duration.

※ **<Turbo Mode (Floor Master Function)>**

'Turbo mode' will automatically operate when the Robot Cleaner cleans carpets.

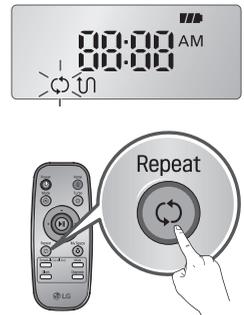


## Repeat Mode

Pressing 'Repeat' button on the Remote Controller will activate 'Repeat' mode, with a voice message.

While in 'Repeat' mode, pressing the same button will cancel 'Repeat' mode, with a voice message.

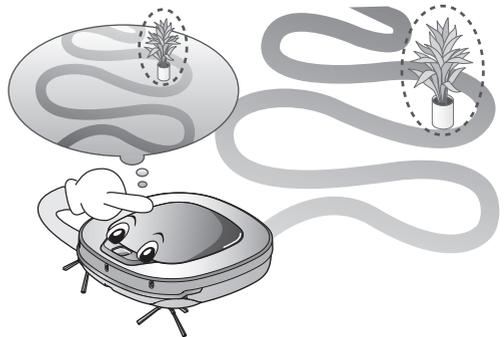
In 'Repeat' mode, Robot Cleaner repeats the cleaning in progress.



## Learning Mode

The Robot Cleaner is capable of memorising the cleaning environment through its Learning mode for an intelligent cleaning operation.

※ 'Learning Mode' is available only when the cleaner starts cleaning from the Home Station.



☑ **Tip** • Precautions with Smart Operation

- This Learning mode enables memorizing locations with obstacles to help bypass them. Robot Cleaner memorizes every aspect of the environment it was subjected to from when it started cleaning from the Home Station to the moment it finishes its course.
- Robot Cleaner learns new conditions again when the location of Home Station has been changed.
- If the learning mode is accepted, a voice message will say "Environment has been studied by learning process."

# TIME SETTING

You can set or change the current time on the Robot Cleaner. Pressing 'Clock' button on the Remote Controller, when the Robot Cleaner is in standby mode, will start the clock setting mode.



 <p>Select by using '◀▶' buttons on the Remote Controller.</p> <p>The function can be heard through the voice guide.</p>		Set the hour by using '▲▼' buttons on Remote Controller.
		Set the minutes using '▲▼' buttons on Remote Controller.
		Set the AM/PM using '▲▼' buttons on Remote Controller.
		Pressing 'Clock' or '▶▶' button on Remote Controller will complete the time setting process.

- Tip**
- Any scheduled cleaning will be activated based on the time on the Robot Cleaner. You must set the clock before setting scheduled cleaning.
  - If there is no input for 10 seconds, the clock setting is canceled.

# SCHEDULED CLEANING

You can schedule cleaning (reservation) so that the Robot Cleaner starts cleaning at a scheduled time.

Pressing 'Schedule' button on Remote Controller, only when the Robot Cleaner is recharging, will start the scheduled cleaning setting.

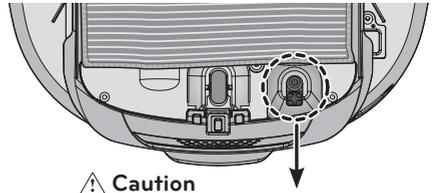


Setting/Canceling the schedule cleaning is only possible when the unit is recharging on the home station

		<p>Select 'Once reservation' or 'Daily reservation' option by using '▲▼' buttons on Remote Controller. A voice message will confirm the schedule.</p>
<p>Select a setting by using '◀▶' buttons on Remote Controller.</p>		<p>Set the hour by using the '▲▼' buttons on Remote Controller.</p>
<p>  'Once reservation'   'Daily reservation'         </p>		<p>Set the minutes by using the '▲▼' buttons on Remote Controller.</p>
		<p>Set the AM/PM using the '▲▼' buttons on Remote Controller.</p>
		<p>Pressing 'Schedule' or '▶▶' button on Remote Controller will then complete the scheduling process.</p>

- Tip**
- When the scheduled time comes up, Robot Cleaner will start cleaning by itself.
  - Scheduled cleaning can only be set when the Robot Cleaner is recharging.
  - While recharging, by pressing the 'Schedule' button on the Remote Controller for 3 seconds will cancel the set schedule.
  - If there is no input when setting the schedule time within 10 seconds, the setting will be canceled.

Attach the mop according to the following description.



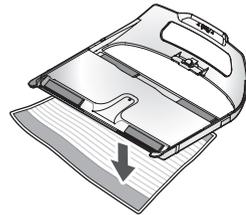
### ⚠ Caution

Make sure that the mop does not cover the **camera sensor on the bottom**. Failure to do so can cause a malfunction.

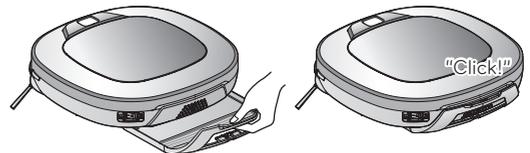
## Attaching the mop

For mop cleaning, mount the mop cloth and mop plate(self-wetting mop plate) to the Robot Cleaner according to the following instructions. The method to attach the mop cloth is the same for both the mop plate and the self-wetting mop plate.

1. Place the mop cloth with the Velcro facing up from the floor and set the mop plate (selfwetting mop plate) on top of it.
2. Align the Velcro of the mop plate (self-wetting mop plate) with the Velcro of the mop cloth and attach them both at the top and bottom.



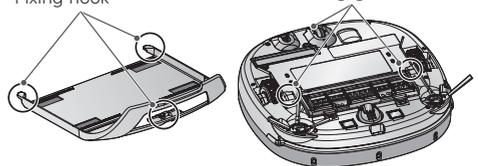
3. Firmly slide the Mop Plate(self-wetting mop plate) into the furrows until you hear a 'click' sound.  
\* Note that, if the Mop Plate(self-wetting mop plate) is not secured correctly, it may separate during the cleaning.



Fixing hook

Fixing groove

4. It is essential that the fixing hooks on the Mop Plate(self-wetting mop plate) align correctly on to the fixing grooves on the underside of the cleaner.



### Tip

- By attaching the ultra microfiber mop cloth, you can effectively use the Robot Cleaner to remove dust on hard floor surfaces.
- When the mop plate is attached, the Robot Cleaner will not climb on to carpets or over thresholds, in order to prevent transferring dirt from the mop.
- To avoid damage to carpets from the Velcro or dirt transfer from the mop, do not attempt to clean the carpet while the mop plate (self-wetting mop plate) is attached.
- Keep the ultra microfiber mop cloth dry when storing. Do not wet the floor surface before use. If there is moisture on the floor, it can interfere with the navigation and damage the unit.
- Smart Diagnosis feature is not available, when the Mop Plate is attached.
- The floor might be wet after mop cleaning is completed. Please be careful.

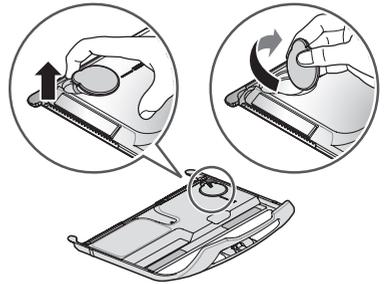
# CLEANING (FOR SELF-WETTING MOP PLATE ONLY)

The self-wetting mop plate is provided only for some models. You can find detailed information from the sheet enclosed in the manual.

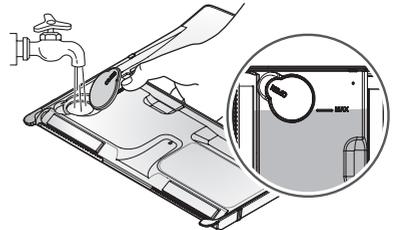
## Refilling with water

Refill the self-wetting mop plate with water according to the following description.

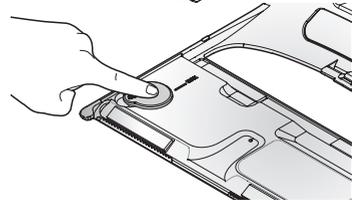
1. Open the rubber stopper of the self-wetting mop plate.



2. Fill with water until reaching the "Max" line shown at the top of the water bucket.



3. Close the rubber stopper completely.



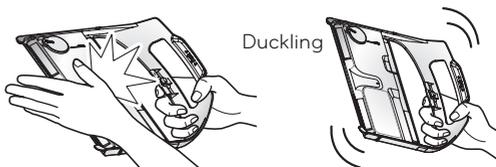
### Tip

- If grease exists on the floor or floor wax (or floor polish) is used, the wheels may slip, obstructing the movement of the cleaner.
  - Use the product only after removing any grease on the floor.
- To avoid odors, wash any foreign material or dust off the mop after cleaning is complete.
- To avoid staining floors, do not use the ultra microfiber mop cloth to clean where there is dirt contaminated with liquids such as coffee or ink.
- Do not clean carpets with the mop plate or self wetting mop plate attached as a dirty mop may soil or damage the carpet.
- When using the ultra microfiber mop cloth, soak the mop cloth in water and then wring the water out sufficiently. Too much moisture may obstruct the movement of the cleaner.
- The smart diagnosis function cannot be used while the mop plate is attached.
- It is recommended to add or remove the water from the self wetting mop plate after attaching the mop cloth to it.
- When refilling with water or moving the cleaner, water may drip down from the neck.
- After cleaning, empty out the water from the self wetting mop plate.
  - Not emptying out the water may cause it to become contaminated and give off a foul odor.
  - Shake the self-wetting mop plate after removing the water to remove any residual moisture.
- Do not leave the cleaner on the floor while the self-wetting mop plate or the mop plate is attached.
  - A wet mop cloth may cause damage to the floor.
- The floor might be wet after mop cleaning is completed. Please be careful.

# CLEANING (FOR SELF-WETTING MOP PLATE ONLY)

## Checking before installation

Before use, lightly tap and shake the self wetting mop plate to check for any water already present inside. The water from the self-wetting mop plate should always be emptied after use to prevent odours or contamination. If there is water present, empty the mop plate and fill it again.

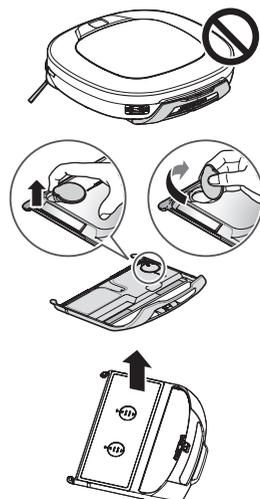


## Storing the self wetting mop plate

Empty the water after use and ensure the mop cloth has been removed, washed and allowed to dry before storing them.

By not doing so, water may remain inside the self wetting mop plate and smell when stored.

After cleaning, remove the self wetting mop plate from the robot cleaner for sufficient drying, empty the water, open the rubber stopper and turn it upside down so that the core is visible.



## Checking before reporting

- If water does not come out in the middle of use, close the rubber stopper and tap the mop plate lightly to check the "Duckling" sound.
- Depending on the condition of the mop cloth and floor, immediately after cleaning starts, two lines of water marks may appear on the floor as the cleaning begins. This is a temporary phenomenon, and during the cleaning, the mop cloth is supplied with water as a whole, so there is no problem in performance.
- The amount of water remaining in the self wetting mop plate after cleaning may vary depending on cleaning time, cleaning area, and material of the floor.
- When cleaning using the self wetting mop plate on slippery tiles, the robot cleaner may slip, causing it to rotate or move backward. In case of such a phenomenon, remove any excess water from the mop cloth to keep it from slipping.
  - Even if there is a temporary malfunction due to floor slippage, there is no problem cleaning the whole house since the robot cleaner calibrates the travel.



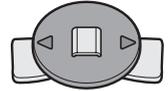
# HOW TO REPLACE THE COTTON

## Please replace the cotton if any following happens

1. If the cotton is discolored or dirty, please replace the cotton.
2. If the water supply time is reduced when using the Self-wetting mop plate, please replace the cotton according to the following guidelines.

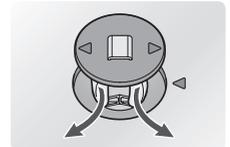
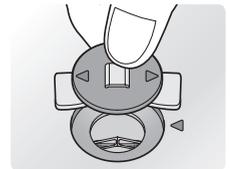
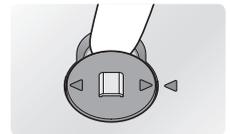
\* The cotton cannot be reused.

Even if you clean or try to insert the removed cotton again, water will not flow out any more. Do not reuse the removed cotton.

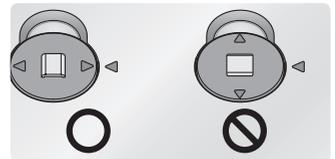


## How to replace the cotton

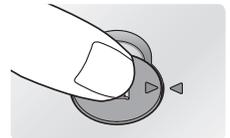
1. Please put your index finger into the hole next to the cotton.
2. Hold the rubber piece and take it out with your index finger and thumb.
3. Insert a new cotton into the hole as indicated by the arrow in the figure.



4. When inserting, check and ensure that the arrow direction of the cotton and the mopping plate is correct.  
(If the cotton is not inserted in the correct direction, water leakage or blockage may occur.)



5. Press the cotton completely into the Self-wetting mop plate with your fingers.



6. Check if the cotton are not flat.

※ If the cotton is not fully inserted, leakage may occur."

7. If there is still water leakage after replacement, please remove the cotton and reinsert it according to the above steps. If there is still water leakage after the above operation, please replace the cotton with a new one.

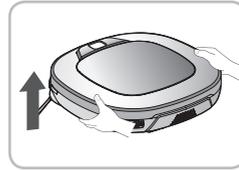
The cotton of the Self-wetting mop plate is a consumable. If you need to purchase it, please contact the Service Station of LG Electronics or go to LG's official website.

# LOCATION SEARCH FUNCTION

The Robot Cleaner remembers its location while cleaning.

If the user moves the Robot Cleaner while it is operating, it will search for the location it was moved from by using its navigational location search function before continuing to clean.

- ※ The navigating function will be activated after the Robot Cleaner adequately recognizes the cleaning environment.



Change location



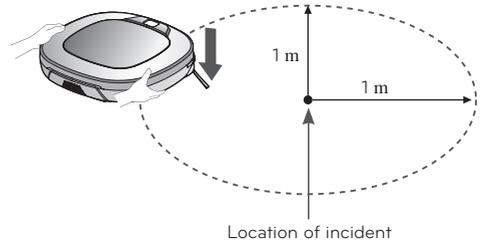
When the location search function is activated, the cleaning mode of the status indicator will flash

## Manual Relocation.

1. With the power off, locate the Robot Cleaner near the location where it was originally moved from.

- ※ The location search is more effective when the Robot Cleaner is closer to the location where it was moved from.

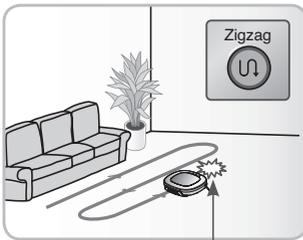
- ※ If it is moved from its original cleaning position by more than 1 m, it becomes difficult for the Robot Cleaner to search for its previous location.



2. Press the START/STOP button on the Robot Cleaner or  button on the remote controller. Robot Cleaner will then start the location search function along with an audio guide.

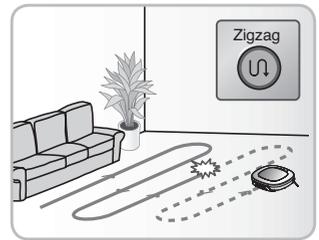
- ※ When the location search is successfully completed, it will continue cleaning from where it was moved.

If the location search fails, it will start again from the beginning.



Location of incident

To find exact location, please step away from the Robot Cleaner.



## Tip

- If the power is turned off after the location search function is set, the location search function will be canceled.
- Location search will be more effective when the Robot Cleaner is closer to the location where it was moved from.

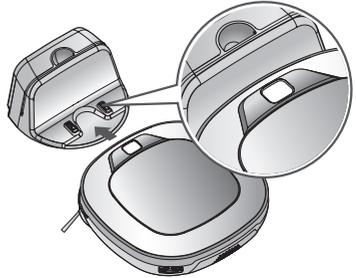
# SMART DIAGNOSIS

Robot Cleaner uses this Smart Diagnosis feature to run a self-diagnosis. If any irregularity is found from the diagnosis, please contact the local LG Electronics service center.

✳ **During Smart Diagnosis, the Robot Cleaner will move about within a 50 cm radius. So, make sure no objects are in the way within a 1 m radius around the Home Station, before starting Smart Diagnosis.**

1. Smart Diagnosis will operate when the main power switch of the Robot cleaner and the Home station are turned on, and the unit docked on the Home station.

✳ **Smart Diagnosis is only possible when the Robot Cleaner is attached to the Home Station.**



2. Press 'Diagnosis' button on the Remote Controller, then the process will start with a voice message which says "Robot Cleaner smart diagnosis will be started. Please step away and clear around 1 meter around the home station."

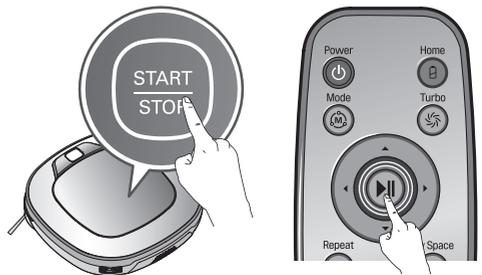
✳ **If the Mop Plate is attached, the process will not be activated.**



3. When the Smart Diagnosis has successfully finished, Robot Cleaner will return back to the Home Station and inform the result through a voice message. After the voice message, pressing the 'HOME' button on the Remote Controller or main unit will allow the voice message to be repeated. To terminate the diagnosing process, press the '▶||' button on the Remote Controller or main unit.

✳ **After the Smart Diagnosis voice message, the Robot Cleaner will start recharging after 1 minute.**

✳ **If an error is detected with any of the Sensors whilst in Smart Diagnosis, a voice message will announce, and the unit will not return to the home station.**



## Tip

- Be careful not to touch the Robot Cleaner or disturb its operation before Smart Diagnosis is complete. If it is accidentally interrupted, turn the main power switch OFF then ON again to resume the diagnosis.
- Smart Diagnosis will not be activated in each of the following cases. In each case, check the problem and try again.
  - Robot Cleaner is detached from Home Station
  - Battery level is insufficient
  - No Dust Bin Filter is fitted.
  - Mop Plate is attached

# SMART DIAGNOSIS

If a voice message is announced after Smart Diagnosis, refer to the following table to take proper actions.

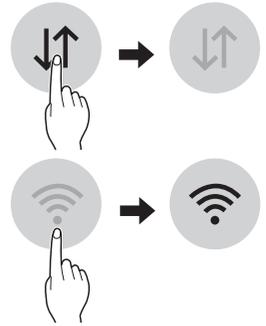
Voice message	Measures (for reference)
Robot Cleaner smart diagnosis will be started. Please step away and clear around 1 meter around the home station.	Clear any object within a 1 m radius around Home Station, and stay back until the diagnosis is complete.
Smart diagnosis can start when it is being charged. Please dock Robot Cleaner to the home station to charge.	Move Robot cleaner to the Home Station to recharge it.
No defect found during diagnosis.	
Diagnosis mode cannot be operated due to a low battery. Please try again after the battery is charged.	Try the Smart Diagnosis again after recharging the battery.
Please check if the dust bin is installed with the filter.	Open the Dust Bin Cover and examine the bin.
Charging cannot be done due to a problem in infrared sensor.	Run Smart Diagnosis again and, if the same message is announced, contact an LG Electronics service center.
Charging cannot be done due to a problem in ultrasonic sensor.	Run Smart Diagnosis again and, if the same message is announced, contact an LG Electronics service center.
Charging cannot be done due to a problem in the cliff detection sensors on the bottom. Please clean the sensors.	Clean the three Cliff Sensors on the bottom at the front of the unit.
Please wipe the lower camera sensor on the right bottom of the Robot Cleaner.	Clean the lens of Camera Sensor on the bottom-right.
Please wipe the obstacle detecting sensor window on the left and right side of the Robot Cleaner.	Clean the lens of the Obstacle Sensors on both the left and right hand sides.
A problem has been found on the Gyro Sensor.	Run Smart Diagnosis again and, if the same message is announced, contact an LG Electronics service center.
Please check for dirt on the left wheel.	Check for foreign materials on the left wheel.
Please check for dirt on the right wheel.	Check for foreign materials on the right wheel.
A problem has been found on the left wheel sensor.	Run Smart Diagnosis again and, if the same message is announced, contact an LG Electronics service center.
A problem has been found on the right wheel sensor.	Run Smart Diagnosis again and, if the same message is announced, contact an LG Electronics service center.
Please check the brushes for obstructions.	Check for any foreign material stuck in the Brush.
A problem has been found in the suction motor.	Run Smart Diagnosis again and, if the same message is announced, contact an LG Electronics service center.
A problem has been found in the acceleration sensor.	Run Smart Diagnosis again and, if the same message is announced, contact an LG Electronics service center.
In order to listen to the smart diagnosis result again, please press the charging button. To stop, please press the stop button.	If you need to repeat the diagnosis result, press the 'Home' button, or press '▶  ' button to finish the diagnosis.
Smart diagnosis mode will be turned off.	
Please try smart diagnosis again after turning the main power switch off and on from the back of Robot Cleaner. If the problem continues, please contact LG Electronics customer care.	
Smart Diagnosis mode cannot be operated with mop plate being attached. Please try again after removing it.	Run Smart Diagnosis again after removing the Mop Plate.
Smart diagnosis has failed to operate. Please try it again after turning off and on the main power switch on the back of the Robot Cleaner.	Turn the main power switch OFF and then ON again to resume the diagnosis. Do NOT touch the robot cleaner or disturb its operation until the diagnosis is complete.

# SMART FUNCTIONS

## Using LG ThinQ Application

### Before Using LG ThinQ

1. Check the distance between the appliance and the wireless router (WLAN network).
  - If the distance between the appliance and the wireless router is too far, the signal strength becomes weak. It may take a long time to register or installation may fail.
2. Turn off the Mobile Data or Cellular Data on your smartphone.
  - For iPhones, turn data off by going to **Settings** → **Cellular** → **Cellular Data**.
3. Connect your smartphone to the wireless router.



### Tip

- To verify the WLAN connection, check that **Wi-Fi** icon  on the control panel is lit.
- The appliance supports 2.4 GHz WLAN networks only. To check your network frequency, contact your Internet service provider or refer to your wireless router manual.
- LG ThinQ is not responsible for any network connection problems or any faults, malfunctions, or errors caused by network connection.
- If the appliance is having trouble connecting to the WLAN network, it may be too far from the router. Purchase a WLAN repeater (range extender) to improve the WLAN signal strength.
- The WLAN connection may not connect or may be interrupted because of the home network environment.
- The network connection may not work properly depending on the Internet service provider.
- The surrounding wireless environment can make the wireless network service run slowly.
- The appliance cannot be registered due to problems with the wireless signal transmission. Turn off the **Main Power** Switch and wait about a minute before trying again.
- If the firewall on your wireless router is enabled, disable the firewall or add an exception to it.
- The wireless network name (SSID) should be a combination of English letters and numbers. (Do not use special characters.)
- This manual may contain content different from the version of the LG ThinQ application. This manual is subject to revision by the manufacturer.
- The LG ThinQ application is subject to change for appliance improvement purposes without notice to users.

## Installing the LG ThinQ Application

Search for the LG ThinQ application from the Google Play Store or Apple App Store on a smartphone. Follow instructions to download and install the application.

## Using the Smart Functions

The LG ThinQ application provides the following the Smart Functions:

**Home Guard, Home View, Schedule Cleaning, Cleaning Diary, Smart Diagnosis, etc.**

### Schedule Cleaning

Use Schedule Cleaning to set a regular cleaning time for the Robot Cleaner to begin cleaning.

### Cleaning Diary

The Cleaning Diary records the date, cleaning mode, and start and completion times of each cleaning and views the cleaning history.

- You can play to see an active cleaning map of the cleaning session.

### Smart Diagnosis

The Robot Cleaner can self-diagnose with the Smart Diagnosis function.

- Refer to the '**Smart Diagnosis Function**' section for details.



### Tip

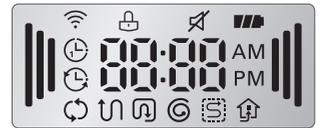
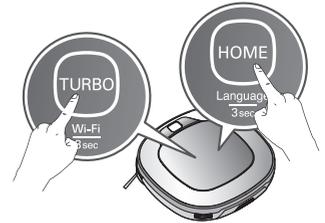
- The provided functions vary depending on the model.
- Follow the guide of the LG ThinQ application for details to use the Smart Functions.

# PRODUCT INFO INITIALIZATION

## Product info initialization

If you happen to sell a used Robot Cleaner, or if you would like to initialize information set up on the product, run Initialization.

1. Press and hold down the "TURBO" and "HOME" buttons for 3 seconds with the power on; all displays will then be lit with a "ding" sound.



2. Press "Start/Stop" to initialize the product; power will be turned off.
3. Pressing "Start/Stop" again will turn Robot Cleaner on with a melody.



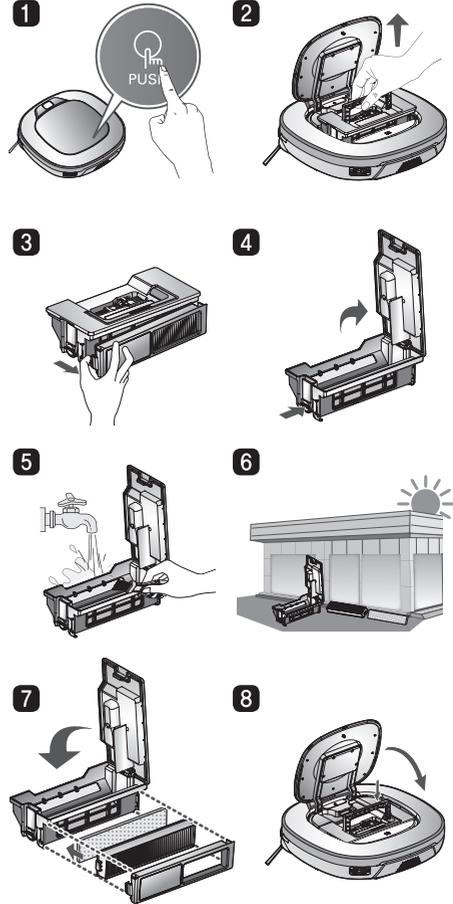
\* Any dispute between seller and buyer is an issue between the two parties. LG Electronics provides a product initialization function for smooth transaction.

- Tip**
- Initialization returns the following information as factory default setting.
    - Cleaning Diary
    - Smart Diagnosis record
    - Nickname
    - Learned cleaning information

# CLEANING THE DUST BIN

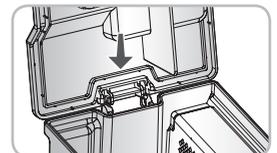
If the dust bin is full, suction power can be reduced and foreign objects/materials such as hair can easily become tangled onto the rotating brush. Clean the dust bin and check the brush before or after each cleaning. Clean the dust bin using following sequence:

1. Open the dust bin compartment cover by pressing the PUSH button on the Robot Cleaner.
2. Grab the handle of the dust bin and pull it upward.
3. Pull the hook on the left of Filter Cover on the rear of Dust Bin to separate the filter and the sponge.  
\* Note that separating the filter may result in dust dropping.
4. Lift the dust bin lid upward while pressing the separation button on the dust bin.
5. Empty the dust bin and clean it with a cleaning brush or under running water.
6. After cleaning with water, completely dry the dust bin in a well-ventilated area out of the direct sunlight.
7. When reassembling or fitting the cleaned Dust Bin, close the lid and put in the Sponge and Particulate Filter.
8. Put the dust bin into the Robot Cleaner and close the dust bin compartment cover.



## Tip

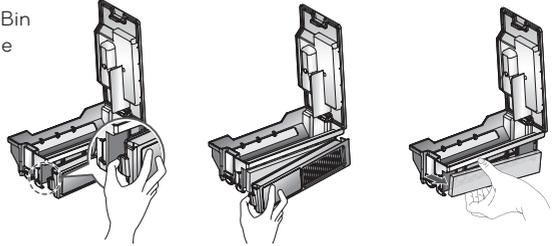
- Operating the unit without Filters fitted to the dust bin can cause a motor malfunction not covered by warranty.
- After cleaning the Dust Bin, make sure to assemble the filter and fit it to the Dust Bin. If you initiate cleaning, with no filters fitted to the dust bin or Filter Cover not assembled, a voice message will be announced which says "Please check if the dust bin is installed with the filter."
- Always ensure that the dust bin lid is refitted correctly after cleaning the dust bin so that it closes easily and accurately.



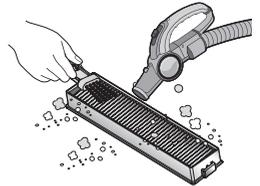
# CLEANING THE DUST BIN FILTER

The Dust Bin Filter consists of a Particulate and Sponge Filter.  
Clean both the Particulate and Sponge filters as per the following sequence.

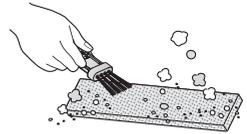
1. Pull the hook on the left of the Particulate Filter module on the rear side of Dust Bin to separate the Particulate Filter and the sponge.



2. Thoroughly clean out the fine dust particles on the Particulate Filter, with a vacuum cleaner or cleaning brush.  
\* Do NOT wash the Particulate Filter with water. Its suction power will be reduced.

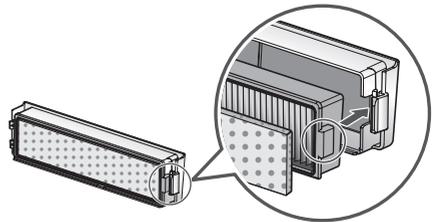


3. Use a cleaning brush to clean the Sponge Filter. If using water to clean it, allow it to dry completely in the shade before refitting.

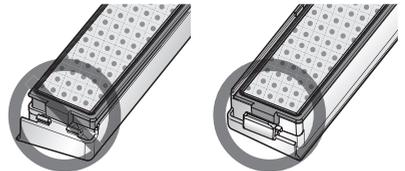


4. Assemble the Particulate and Sponge filters back onto the Filter housing as per the following sequence.

\* Fit the rectangular locator on the Particulate Filter into the locating slot of the filter body.



\* Be careful not to incorrectly assemble Particulate and Sponge Filter onto the Filter housing.



## Tip

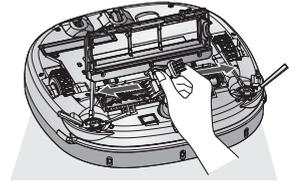
- To preserve the performance of the Robot Cleaner, clean the Particulate Filter at least once a week, with a brush or vacuum cleaner.
- The Particulate and sponge filters must be fitted to the filter housing before refitting the filter to the dust bin. Operating the Robot cleaner without the Particulate and sponge filters will cause the suction motor to malfunction and will be evident when assessed by a technician, and would not be covered under the warranty.

# CLEANING THE BRUSH

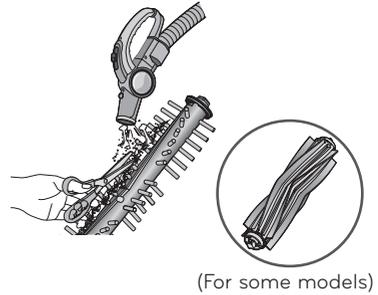
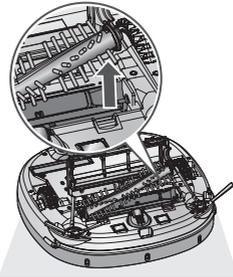
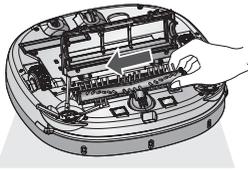
The rotating Brush, located on the bottom of Robot Cleaner, helps collect the dust. Clean the Brush as per the following sequence. (The shape of the brush may be different depending on the model.)

**\* Before turning over the main unit, lay a soft cloth on the floor and remove the Dust Bin. Otherwise, the main unit can get scratched and dust will fall from the Dust Bin.**

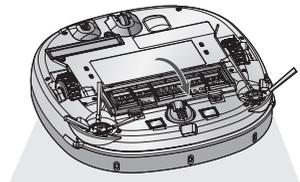
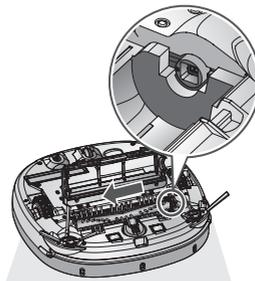
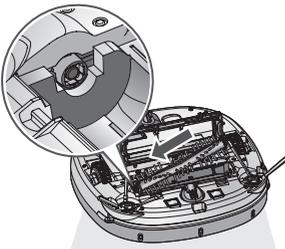
- 1** Turn the Main Power Switch OFF before starting the clean. Put the Robot Cleaner upside down on a soft cloth.
- 2** After checking for foreign materials, press down the Fixing Hook and pull it up to separate the brush Cover.
- 3** By using the cleaning tool, clear hairs and other debris and foreign materials on the Brush and from the 2 smaller jockey wheels.



- 4** Push the Brush all the way into the yellow protrusion.
- 5** While pushing the Brush, lift the white protrusion part up to separate it from the main unit.
- 6** Carefully clean the Brush with a vacuum cleaner or scissors.



- 7** Fit the Fixing Hook (rectangular shape) on the side of the Brush into the slots, with the colors matching.
- 8** While pushing the Brush to the arrow direction, fit the Fixing Hook (rectangular shape) on the opposite side into the slot.
- 9** Press down and close the Cover until a 'crack' sound is heard from both sides of Fixing Hook.  
**\* Be careful not to trap the side brush bristles under the cover when closing it.**



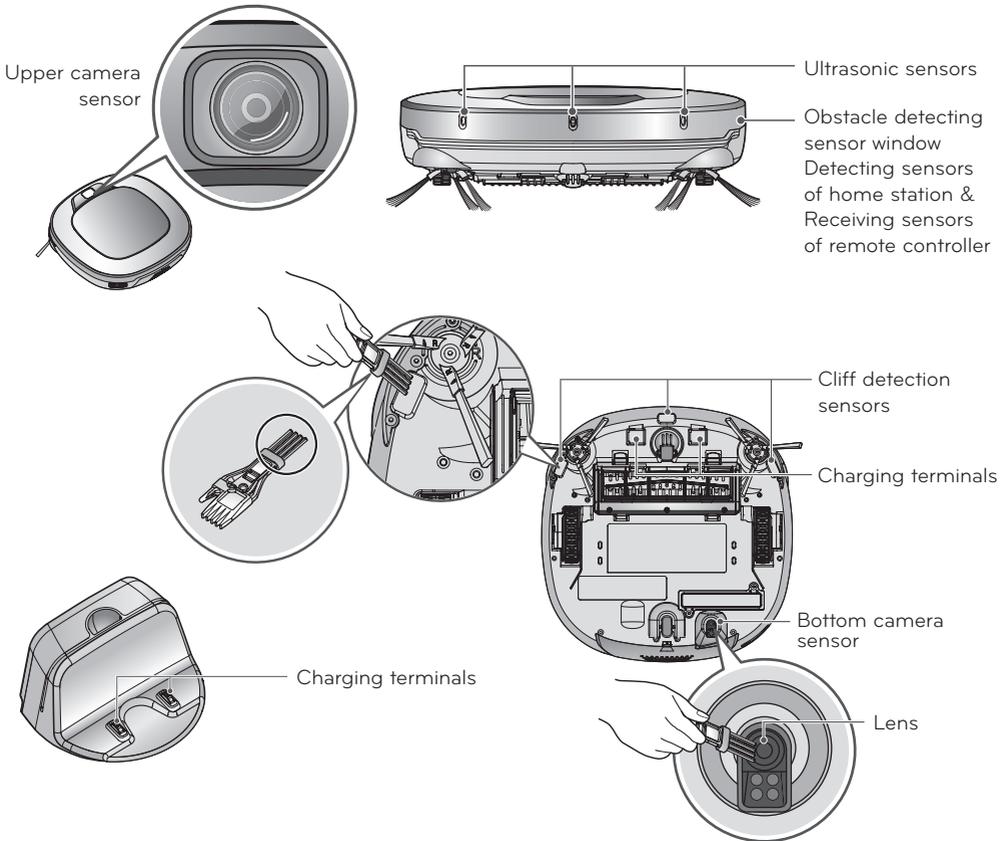
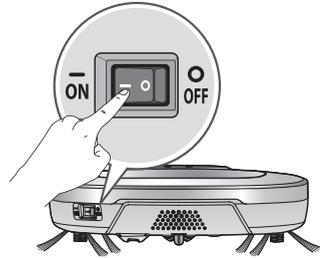
# CLEANING THE SENSORS/CHARGING TERMINALS

There are sensors on the Robot Cleaner that detect obstacles, stairways and the home station for charging the battery. In order to maintain the performance of the Robot Cleaner, regularly clean the sensors and charging terminals as follows:

1. Turn off the power switch on the rear side of the Robot Cleaner.  
Injury can be caused by the activation of the Robot Cleaner if the main power is not turned off.
2. Lay a smooth cloth on the floor, turn over the Robot Cleaner and put it on the cloth.

※ **Please make sure to remove the dust bin before rotating the main body. Otherwise, the dust in the dust bin may fall out.**

3. Use a smooth cloth or cleaning brush to wipe the dust off each of the 3 cliff sensors, camera sensors and ultrasonic sensors and the charging terminal as described below.



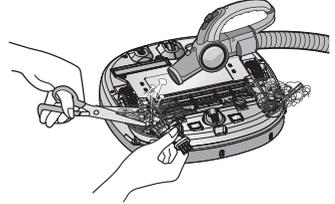
**Tip**

- Do not clean the Robot Cleaner by directly spraying it with water, thinners, solvents, benzene, or any other liquids.
- Call the service center if the sensor or charging terminals are damaged. Sensor and terminal damage can cause the product to malfunction.
- To clean the sensor/charging terminals, use the cleaning brush.

# CLEANING THE SIDE BRUSH

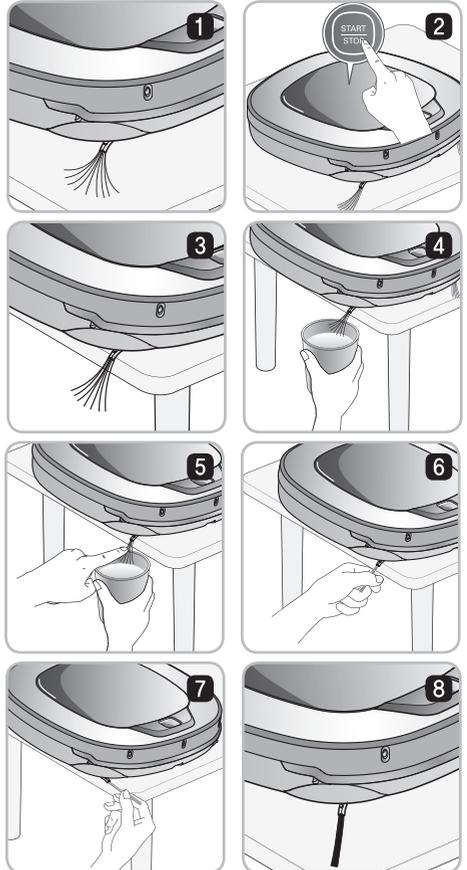
Foreign objects/materials such as hair can easily adhere to the side brush. Remove such materials at least once a week.

If excessive amounts of foreign materials are stuck to the brush, there is the risk of damage to the brushes.



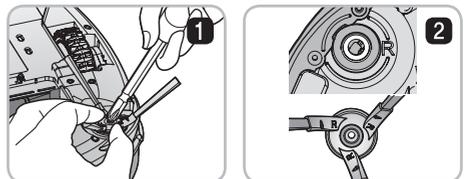
If the floor is rough or frequently cleaned, the side brushes may bend or become deformed. In this case, use the following method to straighten the side brush.

1. The following procedure is helpful in restoring deformed brushes.
2. Turn off the power by switching the main switch off on the rear of the unit.
3. Place the Robot Cleaner at the end of a table to make cleaning the side brush easier. Make sure that the Robot Cleaner is not in danger of falling.
4. Soak the side brush in warm to hot water.
5. Press down on the side brush for about ten seconds so that it is completely submerged in the water.
6. Slowly wipe the side brush by sliding it through your hand.
7. Rotate the side brush and repeat steps 4-6 for each section of the brush.
8. Use the side brush only after it has completely dried.



## Side Brush management

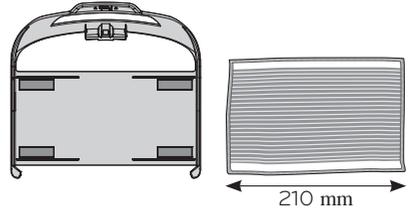
1. Remove the screws by using a suitable screw driver and separate the Side Brush from the main unit.
2. Remove any hair after the separation.
3. Assemble the Side Brush by replacing it onto the bottom of the Robot Cleaner, with the 'R' and 'L' marking of the Brush matching the counterparts on Robot Cleaner.



# CLEANING THE ULTRA MICROFIBER MOP (OPTION)

To avoid odors, dirt and dust should be washed off the mop after it is used for cleaning. Follow these directions to wash the ultra microfiber mop:

1. Separate the ultra microfiber mop from the mop plate.

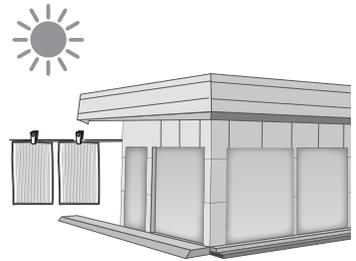


2. Carefully clean it with warm water.



3. Use the Mop after completely drying it in direct sunlight.

\* If the Mop is used in a damp or wet state, it will cause the Robot Cleaner to malfunction.



## Tip

- To avoid product malfunction, only use the ultra microfiber mop provided with the Robot Cleaner.
- Additional microfiber mops can be purchased by visiting a nearby LG Electronics service center.

# TROUBLESHOOTING

## Upon a voice message, "The wheels are not touching the floor. Please move Robot Cleaner onto flat floor."

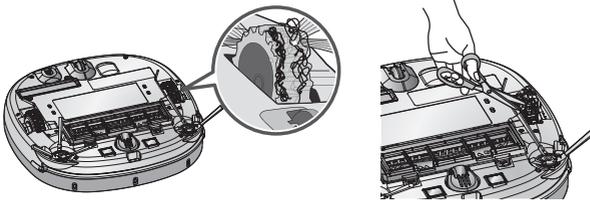
A warning message will be given if a wheel does not contact the floor surface for any reason.

- Is a wheel trapped in the front door, balcony, stairway, etc?
  - ▶ Move the Robot Cleaner on to the flat floor.



## Upon a voice message, "Please remove foreign material on the left/right wheel."

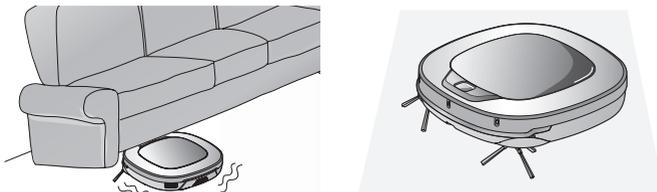
- Is any foreign material wound around the wheel?
  - ▶ Turn off the main power switch on the rear side of the Robot cleaner. Then lay a soft cloth on the floor, turn over the Robot Cleaner, and put it on the cloth. Remove foreign material after observing the wheels.
- \* Please make sure to remove the dust bin before turning over the main body. Otherwise, the dust in the dust bin may fall out.



## Upon a voice message, "Robot Cleaner cannot continue cleaning. Please check the area around Robot Cleaner."

A warning message will be given if Robot Cleaner cannot go on cleaning due to any unfavourable condition.

- Is the Robot Cleaner stuck?
  - ▶ After removing it from the obstacle, place the Robot Cleaner back onto the flat floor.

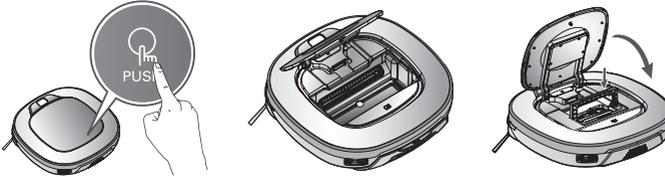


# TROUBLESHOOTING

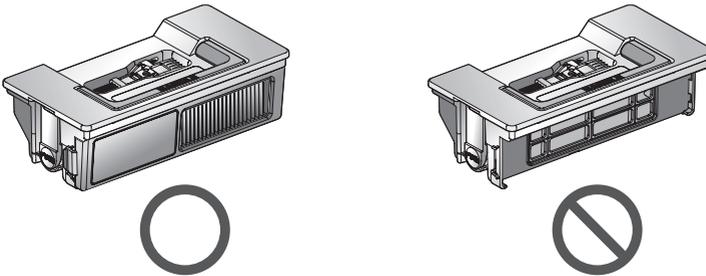
## Upon a voice message, "Please check if the dust bin is installed with the filter."

A warning message will be given if there is no Dust Bin or Filter housing fitted.

- Is the Dust Bin fitted to the Robot Cleaner?
  - ▶ Open the Dust Bin compartment cover and check to ensure the Dust Bin is in place.
  - ▶ Do NOT leave the Dust Bin Cover open.



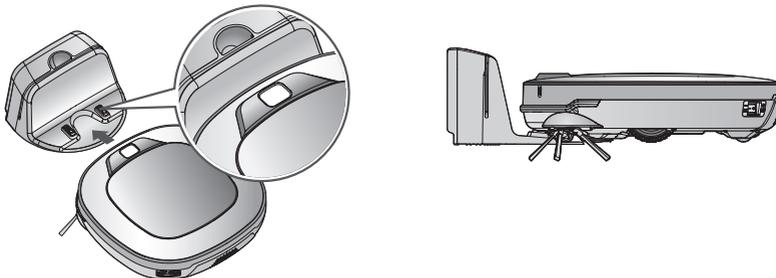
- Make sure the Filter housing is assembled onto the Dust Bin.



## Upon a voice message, "Battery is low. Please move Robot Cleaner onto the home station to charge."

When the remaining amount of battery power is almost nil, the voice, "Battery is low", is generated.

- Initiate battery charging of the Robot Cleaner by moving it to the home station.
  - ▶ When the Robot Cleaner is attached to the docking station successfully, it will start the recharging with the recharging start melody.



# TROUBLESHOOTING

Upon a voice message, "Please remove foreign material from the brushes on the bottom."  
(The shape of the brush may be different depending on the model.)

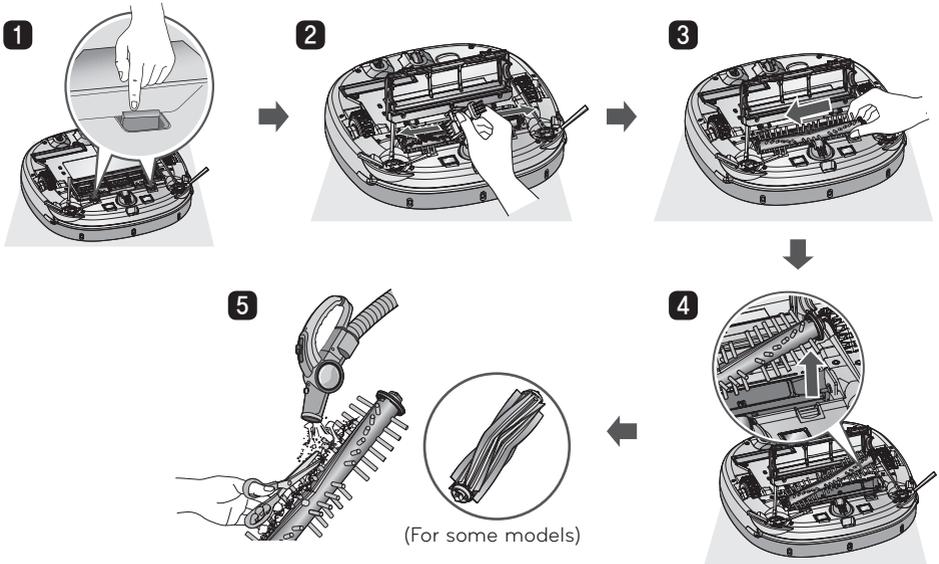
A warning message will be given if foreign materials restrict the Brush's rotation.

Turn off the main power switch on the rear of the Robot Cleaner. Lay a soft cloth on the floor and put the Robot Cleaner upside down on it.

※ **Before turning over the main unit, remove the Dust Bin.**  
**Otherwise, it will cause dust to fall from the Dust Bin.**

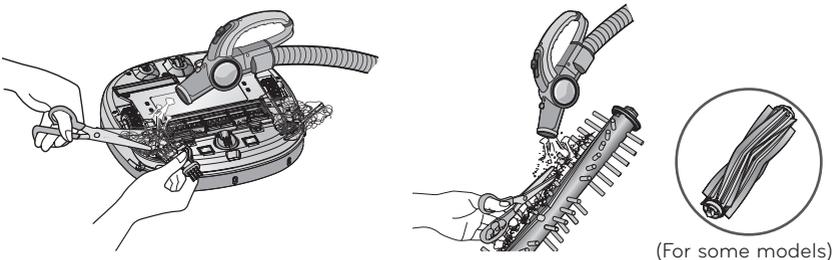
• The brush is making a loud, abnormal sound.

- ▶ Confirm the correct assembly of the brush by checking the separation groove of the brush
- ▶ Remove the lower rotating brush from the Robot Cleaner and remove any foreign material from the brush.



• The lower rotating brush or side brush is stuck.

- ▶ Remove any foreign materials such as cables, thread or hair caught in the side brushes or the lower rotating brush.

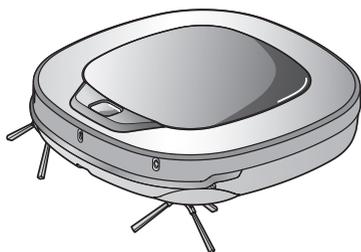


# BEFORE YOU CALL FOR SERVICE

Confirm before reporting the failure of Robot Cleaner.

Problem	Solutions
The power supply cannot be turned on.	Check that the power switch is turned on.
The power supply automatically turns off.	This is not a failure. Robot Cleaner has its own power saving function. If it is not used for ten minutes after the power supply is turned on, the power will automatically turn off.
The Robot Cleaner will not charge.	<ul style="list-style-type: none"> <li>▶ Check whether the main power switch is turned on.</li> <li>▶ Remove objects around the home station.</li> <li>▶ Confirm that the power supply is connected to the home station.</li> <li>▶ Wipe the charging terminals with a dry cloth.</li> </ul>
Suction power becomes weak.	<ul style="list-style-type: none"> <li>▶ Check whether there is foreign material blocking the suction port.</li> <li>▶ Empty the dust bin.</li> <li>▶ Clean the dust bin filter.</li> </ul>
Noise becomes louder.	<ul style="list-style-type: none"> <li>▶ Confirm that the dust bin has been mounted properly.</li> <li>▶ Confirm that the dust bin filter has been mounted properly.</li> <li>▶ Check whether foreign material is caught in the brush.</li> </ul>
The Robot Cleaner will not activate.	<ul style="list-style-type: none"> <li>▶ Confirm that the power switch is turned on.</li> <li>▶ Confirm that the battery has been charged.</li> </ul>
The lower brush does not rotate.	<ul style="list-style-type: none"> <li>▶ Clean the brush.</li> <li>▶ Confirm that the brush has been mounted properly.</li> </ul>
Movements or travel path are abnormal.	<ul style="list-style-type: none"> <li>▶ Carefully wipe the sensors with a dry soft cloth.</li> <li>▶ If the ultra microfiber mop is attached, confirm that it is mounted properly.</li> <li>▶ Turn the main power switch off and on.</li> </ul>
The Robot Cleaner cannot be activated with the remote control.	<ul style="list-style-type: none"> <li>▶ Replace the remote control batteries.</li> <li>▶ Confirm that the control is within the coverage area of the main unit, which is less than 3 m.</li> <li>▶ Check whether the main power switch is turned on.</li> </ul>
Not connected to Application (App).	<ul style="list-style-type: none"> <li>▶ Check if the Internet sharer used to register the product can be used for the Internet.</li> <li>▶ Check if the Internet sharer has been changed since the registration of the product. If the sharer has been changed, register the product again.</li> </ul>

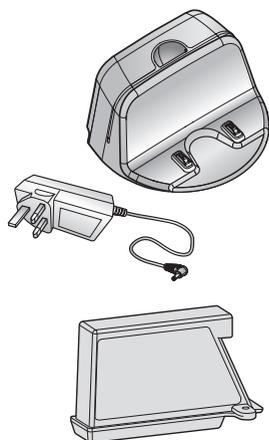
# PRODUCT SPECIFICATIONS



Item/Model	LG Robot Cleaner VR669*****
External Dimensions	340 mm × 340 mm × 89 mm
Power Consumption	58 w
Weight	3 kg
Traveling Velocity	350 mm/s (Maximum)
Use Time	Up to 100 minutes (Based on general wooden floor)
Charging Time	3 hours
Main Functions	Turbo Mode/ Learning Mode Obstacle Sensing / Anti-Plunge function Scheduled Cleaning / Error Displaying Navigation / Auto/Manual Recharging Dry Mopping (cleaning) (Option) Corner Clean / Voice Messeging Map Drawing / Spot Cleaning Repeat Cleaning / My Space Cleaning Cell by Cell Cleaning / Zigzag Cleaning Smart Application function

## Wireless LAN module Specifications

Model	TWFM-L302D
Frequency Range	2412 MHz - 2472 MHz
Output Power (Max)	IEEE 802.11b: 17.80 dBm
	IEEE 802.11g: 16.60 dBm
	IEEE 802.11n(HT20): 16.50 dBm
	IEEE 802.11n(HT40): 16.50 dBm



Item/Model	Home Station (VR650)	EPS : ADS-30FSA-17 17030EPB
External Dimensions	236 mm x 181 mm x 128 mm	95 mm x 43 mm x 30.7 mm
Rating	16.65 VDC	AC 100-240 V~ 50/60 Hz
Output Voltage / Current	16.65 VDC / 1.7 A	DC 16.65 V / 1.7 A
Power Consumption	1.7 A	0.8 A

Item/Model	Battery
Type	Lithium Battery
Rating	DC 14.4 V / 2330 mAh

LG Electronics Inc. hereby declares that this Automatical Battery Operated Vacuum Cleaner with Docking Station is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

For consideration of the user, this device should be installed and operated with a minimum distance of 20 cm between the device and the body.

# REFERENCE ITEMS

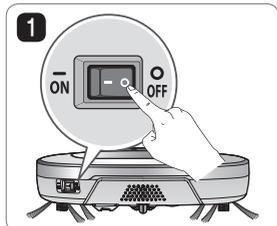
## Open source software notice

To obtain the source code under GPL, LGPL, MPL and other open source licenses, that is contained in this product, please visit <http://opensource.lge.com>.

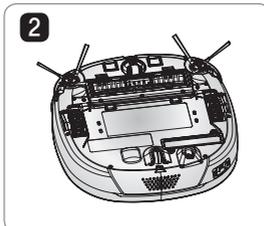
In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to [opensource@lge.com](mailto:opensource@lge.com). This offer is valid for a period of three years after our last shipment of this product. This offer is valid to anyone in receipt of this information.

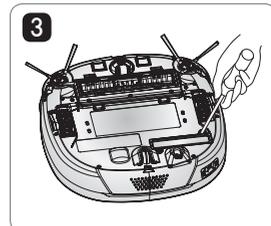
## Removing / Refitting the battery pack



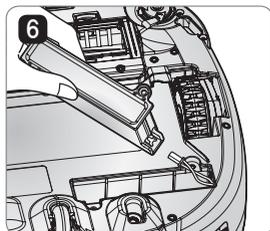
Turn off the main power switch on the back-left side of the Robot Cleaner.



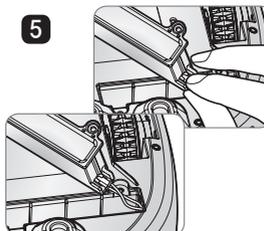
Place a soft cloth on the floor, remove the dust bin, and flip the Robot Cleaner over.



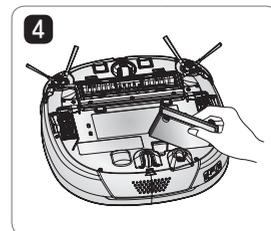
Remove the screws by using a Phillips head screwdriver.



Refit the battery in the reverse order.



Press the connector release lug on the connecting plug to disconnect the battery wiring.



Remove the battery from the device.

## ! WARNING

### Please be careful of fire, explosion, electric shock, or breakdown.

- Never use the battery, adapter, and the charging station from other appliances with this appliance. Use only the battery and the charging station provided by LG Electronics.
- Never use the battery, adapter, and the charging station from this appliance with other appliances.
- Do not damage the battery pack in such ways as dropping, crushing, cutting, or shorting external contacts.
- Do not attempt to disassemble the Robot Cleaner or the battery pack in any case. When the battery pack is damaged or malfunctioning, bring it and the Robot cleaner and Home station to an authorised service center.
- Do not place the battery pack near a heat source or do not dispose of in fire or water.
- Please keep the battery pack away from any damp or wet environment when the pack is charged.
- Please keep away from children, infants and pets.



# MEMO

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# MEMO

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